

## DOCUMENT RESUME

ED 476 473

RC 024 067

AUTHOR Joyce, Peter, Ed.; Poff, Raymond, Ed.

TITLE Daring To Be Different! Proceedings of the Annual International Conference on Outdoor Recreation and Education (ICORE) (15th, Pocatello, Idaho, November 6-11, 2001).

PUB DATE 2001-11-00

NOTE 104p.; Produced by the Association of Outdoor Recreation and Education. For selected individual papers, see RC 024 068-073.

AVAILABLE FROM Association of Outdoor Recreation and Education, 2705 Robin Street, Bloomington, IL 61704, Tel: 309-829-9189. For full text: <http://www.aore.org/ICOREProceedings2001.pdf>.

PUB TYPE Collected Works - Proceedings (021)

EDRS PRICE EDRS Price MF01/PC05 Plus Postage.

DESCRIPTORS \*Adventure Education; Awards; \*College Programs; Courses; Higher Education; \*Outdoor Education; Outdoor Leadership; Program Administration; Safety; School Recreational Programs; Skills; Training

IDENTIFIERS \*Outdoor Recreation

## ABSTRACT

This proceedings begins with a brief history of the International Conference on Outdoor Recreation and Education (ICORE), 1984-2001. Association of Outdoor Recreation and Education (AORE) Leadership Award recipients are then listed, followed by an annotated bibliography of the 16 winners of the National Outdoor Book Award. The proceedings contains 14 conference presentations and presentation summaries: (1) "Climbing Rescue Systems" (Iain Stewart-Patterson); (2) "Outdoor Programs and Academic Departments Working Together: Examining the Benefits of Offering For-credit Recreation Hard Skills Courses" (Raymond A. Poff, David A. Calvin, Thomas L. Stuessy); (3) "The Growth of River Kayaking and Its Indirect Effect on Institutional Whitewater Programs" (Geoff Harrison); (4) "Trip Staff Training Practices: Survey and Discussion Results" (Lynn Zwaagstra); (5) "Humanistic Approach to Debriefing for Outdoor Leaders" (Jerel Cowan, Hugh Gibson); (6) "The Emergence and Evolution of Outdoor Adventure Programs, 1863-2000: A History of Student Initiated Outing Programs" (David J. Webb); (7) "Avalanche Awareness: Safe Travel in the Backcountry" (Steve Kugath); (8) "Wilderness Survival and Outdoor Education" (Matt Ball); (9) "Civilian Jobs with Navy Outdoor Recreation" (Ed Dunning); (10) "Women Rock! A History of Women in Climbing and Mountaineering" (Kaija M. Webster); (11) "An Essay: The Culture of Safety" (Ron Watters); (12) "Leave No Trace: A Unified Minimum Impact Recreation Message" (Stephen Paige, Susann Paige); (13) "Anatomy of Organizing and Hosting a Conference in Mexico" (Jim Fullerton); and (14) "Writing Collegiate Outdoor Program Field Manuals" (Tom Stuessy). (SV)

Reproductions supplied by EDRS are the best that can be made  
from the original document.

# 15<sup>TH</sup> ANNUAL INTERNATIONAL CONFERENCE ON OUTDOOR RECREATION AND EDUCATION

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

---

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.



## DARING TO BE DIFFERENT!

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

—Georgi Baird—

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

1

### ICORE 2001

hosted by:

**Idaho State University  
Pocatello, Idaho**

BEST COPY AVAILABLE

# **PROCEEDINGS OF THE 15<sup>TH</sup> ANNUAL INTERNATIONAL CONFERENCE ON OUTDOOR RECREATION AND EDUCATION**

ICORE 2001 hosted by Idaho State University  
Pocatello, Idaho

November 6-11, 2001

Edited and Prepared by:

**Peter Joyce, Idaho State University**

and

**Raymond Poff, Western Kentucky University**

Published by the Association of Outdoor Recreation and Education (AORE)

[www.aore.org](http://www.aore.org)

Copies of this publication and other AORE publications may be ordered from:

The Association of Outdoor Recreation and Education (AORE)  
2705 Robin St.  
Bloomington, IL 61704

(309) 829-9189 Phone/Fax

[www.aore.org](http://www.aore.org)

© Copyright 2002 by the Association of Outdoor Recreation and Education (AORE)



Campus Recreation

Greetings ICORE attendees,

Welcome to Pocatello!! The time has finally arrived - the annual conference. A time of meeting other professionals, seeing old friends, learning new ideas, sharing what works (and what doesn't), but mostly a time to rekindle the common enthusiasm we all share for our field. Each year, by token of individual host units, the conference takes a new tone- filled with new ideas and fun. This year is no exception. ISU has worked diligently to incorporate the theme of "Daring to Be Different" by offering a variety of educational sessions, guest speakers, and activity sessions. I have looked forward to this, and every conference, from the time I leave the previous ICORE.

Please make the most of these few days- meeting new people, become involved in an AORE sub-committee, take a student to lunch, try new Dutch Oven meals and most of all have FUN! Make sure you allow time to spend time with Vendors- this unique opportunity to meet the company representatives and learn first hand about new equipment and trends in the field is one of the great benefits to the annual conference. Please make time to introduce yourself to them.

I also invite all of you to attend the AORE Board of Director Informational Sessions on Thursday and Friday, prior to the annual business meeting. This will allow you to come meet the current BOD, learn about the changes and advances that have occurred over the last year, and to provide feedback for next year. I am sure I will see all of you at the annual business meeting on Saturday, where we will be voting in the new AORE Board of Directors.

Thanks for attending this year's conference! Enjoy.

Tina Carter  
President- AORE  
Southwest Texas State University  
Director of Outdoor Recreation

## Southwest Texas State University

601 University Drive San Marcos, Texas 78666-4616  
Telephone: 512-245-2392 Fax: 512-245-8486  
SWT is a member of the Texas State University System



# Idaho State University Outdoor Program

Pond Student Union Building, Box 8128  
Pocatello, Idaho 83209-8128

---

November 5, 2001

Dear ICORE 2001 Participant:

Idaho State University takes great pleasure in welcoming you to the 15th Annual Conference on Outdoor Recreation and Education (ICORE), sponsored by the Association of Outdoor Recreation and Education (AORE).

Now that I've taken care of the formal greeting allow me to say, howdy and we're psyched you're here.

"Daring to be Different," the conference theme is borrowed from the Cooperative Wilderness Handicapped Outdoor Group (C. W. HOG). The "hogs," as we affectionately refer to them have been providing outdoor recreation opportunities for ISU students and community members with disabilities for over twenty years. Throughout the conference you will have the opportunity to learn that regardless of one's physical or mental ability, outdoor recreation is a rewarding experience that is easily shared with all. Do take advantage of the opportunity to attend at least one session pertaining to the theme and you will cease taking life for granted, as we so easily do.

If you ever think about hosting an ICORE in the future believe me, it's no easy task. This conference is the result of the selflessness, help and support of numerous folks. I would like to thank everyone who lent a hand in one way or another, especially:

- Tim Moore and the staff at Miami University. Thanks to them we didn't have to recreate the wheel. We just repacked the bearings and tightened the spokes.
- Chrissie Hodel, the most incredible, hard working, dependable intern ever.
- Dana Olson, ISU Outdoor Program for her guidance, support, organizational skills, kind spirit and perma-smile.
- The student staff at the ISU Outdoor Program for without their keen sense of humor the past several months would have been extremely dull.
- The staff and participants of the Cooperative Wilderness Handicapped Outdoor Group for their inspiration and can do attitude.
- All of the conference presenters for their willingness and desire to share in their passion.
- Conference sponsors, Backpacker Magazine, Outdoor Retailer, Stephen Koch, Vortex Backpacks, Outward Bound, Brunton Company, Experiential Resources Inc., and Outdoor Network.

Shower these folks with your praises; dump your complaints, criticisms and problems on me.

We can only hope you have fun learning new things and making new friends. While doing so stop by the vendor exhibits and learn about their programs and equipment. These vendors have supported our conference; please support them in return. Believe it or not there are over 80 sessions available for you to attend and participate in. Enjoy!

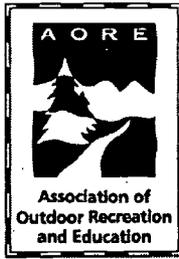
Gratefully Yours - Peter Joyce, Chair, ICORE 2001

(208) 236-3912 (Voice/TDD) 236-4600 (Fax) [www.isu.edu/outdoor/](http://www.isu.edu/outdoor/)

## Table of Contents

<b>A Brief History of the International Conference on Outdoor Recreation and Education (ICORE) .....</b>	<b>1</b>
<b>AORE Leadership Award Recipients .....</b>	<b>6</b>
<b>The 2001 National Outdoor Book Awards .....</b> <b>Ron Watters</b>	<b>7</b>
<b>Climbing Rescue Systems .....</b> <b>Iain Stewart-Patterson</b>	<b>12</b>
<b>Outdoor Programs and Academic Departments Working Together: Examining the Benefits of Offering For-credit Recreation Hard Skills Courses .....</b>	<b>16</b>
<b>Raymond A. Poff, David A. Calvin, and Thomas L. Stuessy</b>	
<b>The Growth of River Kayaking and its Indirect Effect on Institutional Whitewater Programs .....</b>	<b>28</b>
<b>Geoff Harrison</b>	
<b>Trip Staff Training Practices: Survey and Discussion Results.....</b>	<b>33</b>
<b>Lynn Zwaagstra</b>	
<b>Humanistic Approach to Debriefing for Outdoor Leaders .....</b>	<b>36</b>
<b>Jerel Cowan and Hugh Gibson</b>	
<b>The Emergence and Evolution of Outdoor Adventure Programs, 1863-2000: A History of Student Initiated Outing Programs .....</b>	<b>40</b>
<b>David J Webb</b>	
<b>Avalanche Awareness: Safe Travel in the Backcountry.....</b>	<b>54</b>
<b>Steve Kugath</b>	

<b>Wilderness Survival and Outdoor Education .....</b>	<b>61</b>
<b>Matt Ball</b>	
<b>Civilian Jobs with Navy Outdoor Recreation .....</b>	<b>66</b>
<b>Ed Dunning</b>	
<b>Women Rock! A History of Women in Climbing and Mountaineering .....</b>	<b>80</b>
<b>Kaija M. Webster</b>	
<b>An Essay: The Culture of Safety.....</b>	<b>85</b>
<b>Ron Watters</b>	
<b>Leave No Trace – A Unified Minimum Impact Recreation Message .....</b>	<b>88</b>
<b>Stephen and Susann Paige</b>	
<b>Anatomy of Organization and Hosting a Conference in Mexico.....</b>	<b>90</b>
<b>Jim Fullerton</b>	
<b>Writing Collegiate Outdoor Program Field Manuals .....</b>	<b>95</b>
<b>Tom Stuessy</b>	



## **A Brief History of the International Conference on Outdoor Recreation and Education**



---

**1984: Bozeman, Montana.** Sponsored and organized by the University Outdoor Programs from Montana, Idaho and Illinois, this was the first National conference devoted solely to non-profit outdoor recreation and education providers. In planning this conference, Mike Caveness met with ACUI and Ron Watters met with NIRSA, these organizations endorsed the conference and allowed the planning group to publicize the event at their annual meetings. Ron Watters met with Jim Rennie in May of 1984 and subsequently the planning team of Rennie, Watters, Caveness, Dudley Improta, Steve Johnson, Gary Grimm, Bill March, Tom Whittaker, and Jim Rogers was solidified.

Buzzing with energy and excitement, this early gathering, simply called the Conference on Outdoor Recreation, reflected the passions of a nascent field. It was enlightening and inspiring as much as it was delightfully contentious and unruly, as was the case during a heated and animated panel discussion on certification. There was always the feeling of camaraderie and optimism that outdoor programs had come upon a vehicle to share common interests and concerns. This first conference included many hands-on sessions, open discussions, and several sessions on programming for participants living with disabilities. 185 participants.

**1986: Davis, California.** Energized and committed to the early foundation set by the Bozeman conference, several Universities from California organized the second national outdoor gathering. The Davis conference added new dimensions, including a sobering dramatization of the court proceedings of an outdoor liability case and a trade show. It was also marked with light-heartedness. At one evening program, the field of outdoor education was parodied by an ad-lib comedy troop. The conference name evolved to: National Conference on Outdoor Recreation. Steve Leonoudakis, Dennis Johnson, Rodney Neubert, and Mike Caveness worked to organize this conference. Following this conference, Jim Rogers wrote an inquiring letter that gave rise to the question of organizing the group as an association. This letter started a series of discussions and debates over this issue that would last for seven years. 274 participants.

**1988: Fort Collins, Colorado.** Colorado State University continued the now emerging conference pattern. Remarkably, the Colorado conference, like the two previous conferences was not managed and supervised by an association, as are most other conferences. It was organized in manner of true common adventure, solely by cooperation and volunteer effort. In Fort Collins, as the other conferences, participants debated the formation of an Association, but on the whole, they simply wanted to network and work together cooperatively, unencumbered by the control of an outside authority. 304 participants.

**1990: Boone, North Carolina.** The first eastern conference was held in the beautiful Broyhill Inn and Convention Center on the hilly, forested slopes of the campus at Appalachian State University. At Appalachian State University, the Association of Experiential Education made a strong push to assimilate the National Outdoor Recreation Conference into their organization, but conference attendees once again demonstrated their inclination towards independence and declined the overture. During this conference, Dave Webb was recognized by his peers with the Outdoor Leadership Award. At this conference, there was also a great deal of discussion concerning holding the conference every other year or annually. Jim Rennie announced to the group that he planned to host the conference in 1991, starting the trend of an annual conference for our non-association. 303 participants.

**1991: Moscow, Idaho.** Returning to the west at the University of Idaho, the conference went through another name change. From its inception, the conference had attracted a strong contingent from Canada, and it now became known as the International Conference on Outdoor Recreation. At the 1991 conference, Jim Rennie was honored as the recipient of the Outdoor Leadership Award. 151 participants.

**1992: Calgary, Alberta, Canada.** Living up to it's new moniker, the conference headed north of the border and truly became international in scope. At the University of Calgary, conference participants could unwind after a busy day by bouldering on a climbing wall which, to everyone's amazement, was most conveniently located in the Outdoor Program Centre's office. Other participants unwound more unconventionally by taking a wild run down the Olympic Luge course. It was at this conference that participants authorized the formation of an Association Development Committee by a 2/3 vote of those attending to develop a plan to organize the group as an international association and identified conference sites for the next two years. In Calgary, the Outdoor Leadership Award was presented to Jim Rogers. 359 participants.

**1993: Corvallis, Oregon.** After nearly ten years of debate about the “A” word, the big step was taken at Oregon State University. The Association of Outdoor Recreation and Education was created by conference participants and became organized under the auspices of The Outdoor Recreation Coalition of America (ORCA). The Conference name went through one final change, becoming the International Conference on Outdoor Recreation and Education. In the initial meetings of the newly formed association, student voting became an important issue, task forces were developed to address issues of common concern, and Ron Watters was honored with the Outdoor Leadership Award. 166 participants.

**1994: Colorado Springs, Colorado.** For the first time, a branch of the United States Armed Forces, the US Army Community and Family Support Center hosted the conference. Attendees came from throughout the world and enjoyed one of the most memorable social gatherings of any of the conferences; a barbeque and hoe-down held at the Fort Carson Army Base in a huge tent, which, when the music started, quickly filled with the dust rising above the thunder of dozens of stomping feet. 320 participants.

**1995: Ithaca, New York.** Cornell University hosted the conference and decorated the Alberding Field House with live pine trees. Rising above the Alberding forest was the Linseth Climbing Wall, which was available throughout the conference for climbing. Presenting at the conference were some distinguished founders of the modern outdoor recreation movement including Paul Petzoldt, Josh Miner, and Royal Robbins. 319 participants.

**1996: Salt Lake City, Utah.** With striking views of the mountains surrounding A. Ray Olpin Union, the University of Utah graciously hosted the 10<sup>th</sup> ICORE. Featured speakers included Denise Mitten, Executive Director of Woodswomen, Inc, and renowned climbers/adventurers Conrad Anker and Doug Robinson. AORE presented the first Jim Rennie Leadership Award to David Secunda and the first Bill March Student Achievement Award to Russell Parks. 348 participants.

**1997: Merida, Yucatan, Mexico.** In keeping with it’s international title, the 11<sup>th</sup> ICORE headed south to the beautiful city of Merida, capital of the state of Yucatan. It was a true international partnership with the Universidad Autonoma de Yucatan serving as conference host and the University of Nebraska- Lincoln handling the overall coordination. Visits to the Mayan ruins and the closing dinner and Folkloric Dance show made for an unforgettable conference. Tim Moore was honored with the Jim Rennie Leadership Award, and Brian Wilkinson was recognized with the Bill March Student Achievement Award. 110 participants.

**1998: Fort Walton Beach, Florida.** ICORE '98 came together October 20-24<sup>th</sup> in beautiful Fort Walton Beach, Florida with the Air Force Outdoor Recreation Community as the host. With the Gulf of Mexico sand dollar throw from the hotel, the 188 conference participants felt right at home. Early arrivals took part in three two-day training seminars and seven 1-day activities ranging from a deep sea-fishing trip to an afternoon dolphin cruise. The Opening Social and Awards Banquet was held at the Eglin AFB Officers Club located on scenic Choctawhatchee Bay. AORE's Jim Rennie Leadership Award was presented to Jim Fullerton, who served the Association as President, ICORE '97 coordinator, hard-working board member, and mentor to many in the outdoor industry. An emotional high point was Tom Whittaker's incredible multi-media session One Foot on the Road to Everest, covering his recent expedition. Spellbound and inspired, we shared a personal odyssey that took him from a "never walk again" prognosis to being the first disabled person to summit Mt. Everest in May 1998. The final day saw a lengthy and difficult membership meeting culminating in the decision for AORE to end its five-year relationship with the Outdoor Recreation Coalition of America (ORCA) and form an independent, not-for-profit association. The closing social and Hawaiian Luau was held poolside in the courtyard replete with native, and not-so-native dancers. A selection of eleven different post-conference activities was offered to bring ICORE '98 to a close. 188 participants.

**1999: Jackson Hole Wyoming**

How fitting to hold the 13th ICORE in Jackson Hole, Wyoming, a conference dedicated to the passing of an old friend, Paul Petzoldt. The 13th ICORE was hosted by Clemson University and was held at the Snow King Resort. Attendance was a record high 350 and pre-conference workshops on LNT, WFA and Risk Management were full. The Association leadership reported on a year filled with changes that included a new management company and restructuring the AORE to plan for the future. Highlights of the conference included over fifty educational sessions, over 30 exhibitors, and an excellent keynote address by John Gans, Executive Director of NOLS. Robert Taylor, undergraduate student at Clemson University was awarded the Bill March Student Achievement Award and Rob Jones was honored with the Jim Rennie Leadership Award by the AORE. The conference was the one of the best attended in AORE's history, and the feedback was excellent. Snow King proved to be a superb location with its easy access to the Grand Teton National Park and the beautiful Jackson Hole area. 350 participants.

**2000: Miami University, Oxford, Ohio.**

If there's one word that can be used to sum up ICORE 2000, it is this: warmth. When participants arrived in Oxford, Ohio they were greeted by welcoming smiles, which set the tone for the rest of the conference. Throughout the conference, the atmosphere had a down-home, mid-western feel to it: friendly, kind-hearted and as comfortable and inviting as a steaming bowl of grandma's soup on a cool November day. It is also a conference that will be remembered for its excellent planning and organization, and for one of the most diverse and busy programs of educational sessions ever.

Evening program speakers included Gudy Gaskill, the diminutive, powerhouse of a woman whose persistence and leadership for 27 years resulted in 500-mile Colorado Trail. The following evening Paul Piana, in a refreshingly unpretentious and light-hearted style, narrated a video of a big wall climb and had conference participants nearly rolling in the aisles with laughter.

In a dramatic moment on the final evening, the room was darkened, and a video flashed on the screen. To the score of Chariots of Fire, the video showed a blind man and his dog hiking the Appalachian Trail. The man stumbled and fell, but with help of his dog he rose and continued. And then again he fell, and again and again, but each time he would struggle to his feet and doggedly continue on his way. The video was turned off, the lights came on, and Bill Irwin and his dog Orient walked on the stage. The audience immediately rose to their feet and Irwin was welcomed by a long and thunderous ovation. It was an entrance and presentation few will forget.

These are just a few of the highlights. Of course, there was much more. Participants attended over 50 educational sessions. The pre and post workshops were busy, and the professionals and students networked and shared information. Indeed, the Oxford conference was a significant event in the field of outdoor recreation and education and a hopeful start to the new century. 384 participants.

**2001: Pocatello, Idaho.**

The 15th ICORE conference was hosted by the Idaho State University Outdoor Program and Cooperative Wilderness Handicapped Outdoor Group (C.W. HOG). The conference theme, "Daring to be Different" was an attempt to bring awareness that including folks with disabilities in outdoor recreation programs could be more rewarding than liability. The unseasonable warm weather allowed conference participants to get outside to rock climb, kayak, and even construct a yurt in the mountains surrounding Pocatello. 85 educational sessions provided something for everyone. Keynote speakers Steve DeRoche, a double amputee and Mark Wellman, a paraplegic gave moving presentations of their accomplishments trekking, skiing and climbing in the mountains. An old barn style hoe down, complete with a Dutch oven feast, will be remembered for a long time by those that danced the night away. Jim Rogers was honored with the Jim Rennie Leadership Award, and Paul Meinersmann was recognized with the Bill March Student Achievement Award. 305 participants.



# AORE Leadership Awards



## The Outdoor Network Leadership Award

(Pre-dating the Jim Rennie Award)

“ For Excellence in Service to the Outdoor Profession in Facilitating Communication and the Sharing of Resources Between Outdoor Professionals.”

1990	David J Webb
1991	Jim Rennie
1992	Jim Rogers
1993	Ron Watters

## *Jim Rennie Leadership Award*

The Jim Rennie Leadership Award recognizes contributions to AORE which are far beyond the ordinary and which have had significant and lasting impacts on the Association and its mission or professional work or leadership of unusual significance in the field of outdoor recreation and education.

1996	Dave Secunda, ORCA
1997	Tim Moore, Miami University, OH
1998	Jim Fullerton, Idaho State University
1999	Rob Jones, University of Utah
2000	Greg Lais
2001	Jim Rogers

## *Bill March Student Leadership Award*

The Bill March Student Achievement Award is presented to an individual who makes outstanding contributions to an outdoor recreation and education program while pursuing an undergraduate or graduate degree.

1996	Russell Parks, Miami University, OH
1997	Brian Wilkinson, University of Utah
1998	No Nominations
1999	Robert Taylor, Clemson University
2000	Tim King, Southwest Texas State
2001	Paul Meinersmann

## The 2001 National Outdoor Book Awards

Ron Watters, Chair  
National Outdoor Book Awards

The National Outdoor Book Awards (NOBA), through its annual award program, honors excellence in outdoor writing and publishing. The Association of Outdoor Recreation and Education (AORE) is one of the sponsors of the program. Sponsorship of the program provides AORE members with an important educational benefit in that they are able to keep up with the latest literature in the outdoor field.

The NOBA nomination process begins with the announcement of the program in the spring of the year. Publishers and authors send their entries into the NOBA central office located at Idaho State University. All books are due by September 1st. Within three days of the September 1st deadline, books are cataloged, packaged, and sent to judging panels throughout the country. The backgrounds of the judges are diverse. Included on the panels are educators, academics, trade representatives, authors, book reviewers, and outdoor columnists. All of the judges serve without pay.

Judging takes place during September and October. Judges use a pre-printed evaluation form and independently score books based on a series of criteria. The best accumulated scores determine winning books. The names of the winners remain a closely guarded secret until they are announced at International Conference on Outdoor Recreation and Education.

Below is a list of the winners of the 2001 Awards.

History Biography Category. Winner #1: *A River Running West: The Life of John Wesley Powell*. By Donald Worster. Published by Oxford University Press, New York.

For years, people have been waiting for this book: an authoritative study of Powell—the whitewater world's first river runner as well as the West's great voice of reason. Thanks to Donald Worster, we now have one. A superbly written book supported by exhaustive research, this 673-page book is an expansive view of Powell's life and times—as expansive as the view across the Colorado Plateau. *A River Running West* is a memorable portrait of one of the greats of river history.

History Biography Category. Winner #2: *Sunk Without a Sound: The Tragic Colorado Honeymoon of Glen and Bessie Hyde*. By Brad Dimock. Published by Fretwater Press, Flagstaff, Arizona.

The 1920s was the decade of mysteries for the outdoor world. The mountaineering world had Mallory dissolving into the mists of Everest, while the whitewater world had Bessie and Glen Hyde disappearing in the depths of the Grand Canyon. This fascinating exploration into what happened to the Hydes is an important contribution to the whitewater genre, and seasoned Colorado River boater, Brad Dimock, was the perfect person to write it. Few others would have been able to put the right amount of heart and soul into an investigation of the mystery; indeed, Dimock and his wife, Jeri, actually built a replica of the Hydes' wooden scow and ran the river in much the same manner as the young couple would have done in the 1920s. Enthralling and compelling, this is a book that refuses to be put down.

Literature Category. Winner: *Where the Pavement Ends: One Woman's Bicycle Trip Through Mongolia, China and Vietnam*. By Erika Warmbrunn. Published by The Mountaineers Books, Seattle.

Vivid, often light-hearted, and honestly written, *Where the Pavement Ends* is the story of Erika Warmbrunn's incredible 8-month, 5,000-mile mountain bike ride across middle Asia. Skillfully crafted with a sense of excitement and momentum that resembles coasting downhill on a bicycle, *Where the Pavement Ends* provides fascinating glimpses of East Asian life and landscapes along Warmbrunn's journey. You'll be drawn in by her openness and curiosity about life and rejoice in her hard-earned accomplishments.

Outdoor Classic Category. Winner: *Wilderness and the American Mind*. By Roderick Nash. Published by Yale University Press, New Haven.

This groundbreaking book, first published in 1967, is Roderick Nash's classic study of American attitudes toward wilderness. Beginning with the Old World's roots of opinion and reaching through the early twenty-first century, it ties together disparate elements of philosophy, history, politics, and popular attitudes into a concurrent and understandable whole. Scholarly and perceptive, *Wilderness and the American Mind* numbers among the great works on the outdoors.

Design and Artistic Merit Category. Winner: *The Living Wild*. Photography by Art Wolfe. Published by Wildlands Press, Seattle.

This is a book that will take your breath away. *The Living Wild* is a technical and intellectual marvel, providing a photographic celebration of the diversity of life inhabiting our planet. Celebrated nature photographer Art Wolfe took three years to produce the color photographs of 140 different species from 40 different countries that grace the pages of this large format book. Wolfe is clearly at the top of his game in *The Living Wild*, and this book should reinforce his position among the best nature photographers in the field. Using a highly effective combination of lens size and perspective, he almost brings the viewer into the photograph, blurring the boundaries of real and artificial. It's a sight to behold.

Children's Category. Winner #1: *What Does the Sky Say?* By Nancy White Carlstrom. Illustrated by Tim Ladwig. Published by Eerdmans Books for Young Readers, Grand Rapids, Michigan.

In *What Does the Sky Say?*, a child watches the sky through the changing of the seasons and in all kinds of weather, all the while learning to listen to the voice of the sky. The message of Nancy White Carlstrom's imaginative and poetic text is calming and inspiring, and Tim Ladwig's colorful illustrations capture the magic of childhood and our deep connection to all creation. For all ages.

Children's Category. Winner #2: *Coyote and Badger: Desert Hunters of the Southwest*. Written and illustrated by Bruce Hiscock. Published by Boyds Mills Press, Honesdale, Pennsylvania.

This book, for children from 7 to 10 years old, is a natural history story about predators and their struggle to survive. The tale unfolds when a coyote and badger meet and a mysterious bond forms between the two as they begin hunting together. Set in New Mexico among Anasazi ruins, the story is perfectly complemented with Bruce Hiscock's warm and luminous watercolors of a spacious desert.

Nature and Environment Category. Winner: *Wild Solutions: How Biodiversity is Money in the Bank* by Andrew Beattie and Paul Ehrlich. Illustrated by Christine Turnbull. Published by Yale University Press, New Haven.

Eminent ecologists Beattie and Ehrlich team up in this text for a careful examination of the earth's biological diversity. *Wild Solutions* shows how the natural systems that surround us play an important role in protecting our basic life-support systems. Based on a solid and well-developed premise, it's a convincing book conveying a powerful and urgent message.

Nature and Environment Category. Honorable Mention #1: *For Love of Wildness: The Journal of a U.S. Game Management Agent*. By Terry Grosz. Published by Johnson Books, Boulder.

*For Love of Wildness* is the eagerly awaited sequel to Terry Grosz's first book on his life as a wildlife officer--and he certainly doesn't disappoint. An absorbing book, written in an honest and down-home style, Terry Grosz takes the reader along on a wild ride of chases, stakeouts, and shoot-outs in his efforts to protect America's wildlife.

Nature and Environment Category. Honorable Mention #2: *Pacific Light: Images of the Monterey Peninsula*. By Douglas Steakley. Poetry by Ric Masten. Published by Carmel Publishing Company, Carmel, California.

This is a book of geography and of passion, communicating its story through the interplay of images and poetry. From Douglas Steakley's breathtaking photography emerges the face of the Monterey landscape while Ric Masten's words provide its voice.

Nature Guidebook Winner: *Butterflies Through Binoculars: A Field Guide to the Butterflies of Western North America*. By Jeffrey Glassberg. Published by Oxford University Press, New York.

This magnificently crafted guidebook is illustrated with vivid color photographs that set a new standard in butterfly identification. It's a guide that can quickly grow on you. In no time, you may find yourself hopelessly hooked--and haunting the fields and forests searching for those delicate insects that add so much color to summer afternoons.

Nature Guidebook. Honorable Mention: *The Raptor Almanac: A Comprehensive Guide to Eagles, Hawks, Falcons and Vultures*. By Scott Weidensaul. Published by The Lyons Press, New York.

A far-reaching reference and guide to raptors, this book is for those bird-watching enthusiasts who want to go beyond the fundamentals. Its contents include raptor evolution, behavior, courtship, nesting, migration, and more.

Instructional Category. Winner: *The Orvis Fly-Tying Guide*. By Tom Rosenbauer. Illustrations by Rod Walinchus. Fly Pattern Photographs by Henry Ambrose. Published by The Lyons Press, New York.

Never tied a fly before? This is the book to get. With its clear, step-by-step instructions, great color photographs, and uncluttered and thoughtful design, you'll find yourself tying up streamers, nymphs, as well as dry and saltwater flies in no time.

Outdoor Adventure Guidebook Category. Winner: *Fifty Favorite Climbs: The Ultimate North American Tick List*. By Mark Kroese. Published by The Mountaineers Books, Seattle.

This splendidly done, full-color treat-for-the-eyes blends personality and place, showcasing fifty accomplished climbers and their favorite climbs. Each section includes a biographic sketch of the climber, a story about his or her chosen climb, and a route description clearly illustrated by a photograph and accompanying schematics.

Outdoor Adventure Guidebook Category. Honorable Mention #1: *Hike America Virginia: An Atlas of Virginia's Greatest Hiking Adventures*. By Bill & Mary Burnham. Published by The Globe Pequot Press, Guilford, CT.

Strike out and explore the trails and history of Virginia's backcountry in this handsomely designed and well-written guide.

Outdoor Adventure Guidebook Category. Honorable Mention #2: *101 Hikes in Northern California: Exploring Mountains, Valleys, and Seashore*. By Matt Heid. Published by Wilderness Press, Berkeley.

A wonderful selection of trails, good writing, and helpful graphics make this a choice guidebook for ambles in the special places of Northern California.

## **Climbing Rescue Systems**

**Iain Stewart-Patterson  
University College of the Cariboo  
Kamloops, British Columbia, Canada**

### **Abstract**

The tools available for an improvised rescue in steep rock climbing terrain are limited. Ideally the rescue response will come from within the climbing party. In the instructional or guiding scenario, the guide will usually be leading the climb. This presents a more complex scenario for the recreational climber than the guide for the simple reason that accidents usually involve the lead climber. Rescuing an injured leader may involve complex decision-making in the absence of solid information, with limited tools. Rescuing an injured second requires a similar skill set, however accessing the victim is much easier.

The use of a self locking belay device such as the Petzl Reverso, Petzl Gri-gri, New Alp Plaque, or Camp Gi-gi will not only make belaying easier, but also rescuing. The following improvised rescue techniques are part of the Association of Canadian Mountain Guides technical guidelines and can be referenced in the Technical Handbook for Professional Mountain Guides.

### **Rock Rescue**

A rescue response from within the climbing party, also known as improvised rescue, tends to be more complex for a recreational climber than an instructor or a guide. Climbing partners will likely be swapping leads, whereas the multi-pitch instructional or guiding scenario will have the guide in the lead. If an injury were to occur, it would most likely be to the leader, but it could also happen to the second. Rescuing an injured leader can be a complex situation. If the leader is more than half the rope length out from the belay, or on a diagonal or overhanging pitch, lowering the leader back to the belay is not an option. The second will have to tie-off the rope for the upward pull, ascend the loaded rope, build a new belay station near the top piece of protection, transfer weight of the fallen climber on to the new station, render first aid, then decide what to do.

A guide or instructor will rarely need to deal with rescuing his or her client as a result of a lead fall in multi-pitch terrain. This session will focus primarily on the skills needed to rescue a second. There are additional skills needed to rescue a leader, which will not be covered. Helping an injured, or fatigued second is greatly facilitated by using a direct anchor belay. When using this as a regular technique it will be much easier to manage the belay and will significantly increase the speed of a rescue response. The only specialized tools needed are a couple of five meter (16 foot) long, seven millimeter diameter, accessory cords. A self-locking belay device

such as the Petzl Reverso, Petzl Gri-gri, New Alp Plaquette, or Camp Gi-gi will make belaying easier, as well as rescuing.

The components, or tools can be used in a variety of ways to achieve a variety of objectives. The components include: a belay/lowering device, a tie-off method for the device (which can be released under load), the prussik hitch, a ratcheting device or method, a pulley system, and a block and tackle.

### Steps in Rope Rescue

1. Arrest the fall
2. Tie-off the belay
3. Transfer the load to the anchor. If a direct anchor belay has been used, this has already been accomplished.
4. Assess the situation. Is there further hazard? Is there a ledge nearby, preferably below the victim? It is easier to lower than to raise. Use gravity whenever possible.
5. Attend to the victim. Once there is no further hazard to the belayer or the injured climber, render first aid for any serious injuries. Minor injuries can be dealt with once the situation is more stable. It is quite often most efficient to lower a person with a minor injury, back to the last belay.
6. Create a lowering, raising, or counterbalance system. If the injured climber is less than half the rope-length away and the injury needs immediate attention, the counterbalance rappel is the most efficient method of rescue. Overhanging, or traversing pitches make this more difficult.

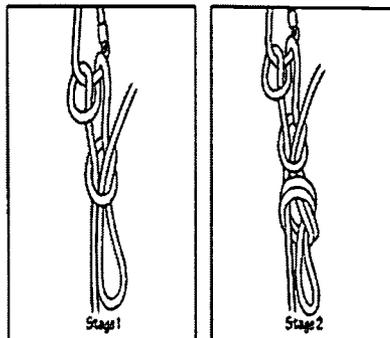
**NOTE - BACKUPS:** The fallen climber needs to be attached to the focal point of the anchor with the main climbing rope, or equivalent, at all times. During load transfers, the weight will be held by a prussik. This needs to be backed up. A figure eight knot tied on the climbing rope and clipped into the focal point, or a blocked belay system, will safeguard this. A ratcheting system must be backed up in a similar manner, unless it is a self-locking plate (ie. Reverso).

### Escaping the System

The belayer needs to be freed up from holding the weight of the fallen climber. If a ratcheting belay device such as a Reverso is used directly off the anchor, this step has already been achieved. With a non-ratcheting belay method (ie. a munter hitch) directly off the anchor, a releasable knot must be tied to hold the load. Redirected belays (belay device on the harness redirected through the anchor) and indirect belays (body belay or device on the harness) are more demanding both in terms of holding the fall and transferring the load to the anchor.

### Blocking the Belay

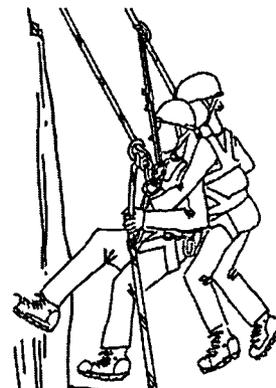
Blocking the belay is achieved by tying a slippery overhand knot. This must be backed up by an additional double overhand.



BEST COPY AVAILABLE

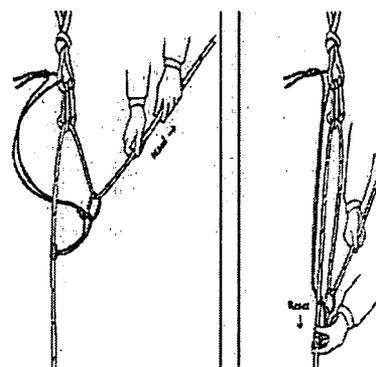
### Counterbalance

The counterbalance is used when the victim needs quick attention. It is best used when there is an anchor not far below the victim. It is very difficult to use on overhanging or traversing terrain.



### Raising System

A 3:1 raising system can be created by tying an overhand knot in the long prussik. A clutch is installed on the main rope, which is then looped back through a carabiner on the prussik. The theoretical mechanical advantage may be 3:1, but friction brings it down to about 1.75:1

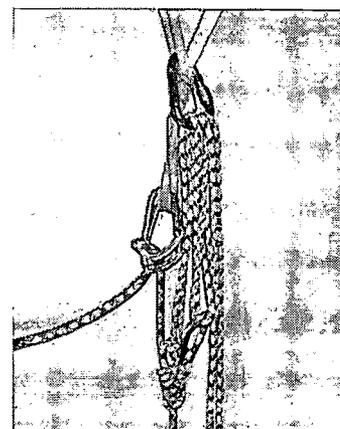


### Ratchets

There are a variety of ways to achieve a ratcheting effect. The commercial products such as the Reverso, or Gri-gri work well. It can also be achieved using common climbing equipment (carabiners and prussiks). The guarda hitch uses two similar size, non-locking, d-shaped carabiners. The addition of a pulley makes the system more efficient.

### Block and Tackle

A simple block and tackle can be constructed using the long prussik. The cord is looped back and forth between a carabiner clipped in close to the prussik knot on the cord and a carabiner clipped into the shelf. This creates a simple yet effective method of raising the load off the clutch.



## Summary

- These are specialized techniques that require training and practice.
- They are also skills that all multi-pitch climbers should be proficient in.
- These skills once learned, must be practiced on a regular basis to be useful. A minor mistake can have catastrophic consequences. For example: mishandling a load transfer can result in the injured climber being dropped. If he/she does not hit anything on the way down, the shock load on full extension of the rope may cause the anchor to fail.
- It is important to understand both the application and the limitation of each technique.

## References

*Technical Handbook for Professional Mountain Guides*, The Association of Canadian Mountain Guides, 1999

## Bio information

**Iain Stewart-Patterson, BPE (Calgary), MEd (Calgary)**

Iain is a fully certified mountain guide (IFMGA/UIAGM) with the Association of Canadian Mountain Guides. He has over 20 years experience ski touring, mountaineering, ice and rock climbing. He has been on expeditions to Nepal, Peru, Mexico, and Alaska. On technical rock and waterfall ice terrain, he has completed over 30 first ascents. Iain is currently the program coordinator of the Adventure Guide Diploma at the University College of the Cariboo, where he teaches a combination of theory and activity courses. Iain is a Professional Member of the Canadian Avalanche Association and is an instructor for both the Association of Canadian Mountain Guides and the Canadian Avalanche Association Training School.

# **Outdoor Programs and Academic Departments Working Together: Examining the Benefits of Offering For-credit Recreation Hard Skills Courses.**

**By**

**Raymond A. Poff, Ph.D.  
Southwest Texas State University  
San Marcos, Texas**

**David A. Calvin, M.S.  
Indiana University Outdoor Adventures  
Bloomington, Indiana**

**Thomas L. Stuessy, M.S.  
Indiana University Outdoor Adventures  
Bloomington, Indiana**

## **Abstract**

Many benefits can be realized when Outdoor Programs and Academic Recreation Departments work together to offer university students for-credit recreation skills courses. Some of these benefits include: increased revenues, higher course enrollments, increased awareness on campus, recruitment of students into leadership/trip leader roles and/or new majors, and improved overall relationships between outdoor programs and academic recreation programs.

This paper presents the case of Indiana University Outdoor Adventures (IUOA) and Indiana University, Department of Recreation and Park Administration working together to offer students hard skills courses on a for-credit basis. The relationship of IUOA and the recreation department in offering these courses is discussed with an emphasis placed on examining the benefits associated with such a cooperative venture. In addition to costs and benefits, information on the types of courses offered, academic requirements, course fees, tuition, course enrollments, and logistics will be covered.

## Historical Background

The relationship between Indiana University Outdoor Adventures (IUOA) and the Indiana University Department of Recreation and Park Administration began in the early 1980's with the Department providing IUOA with lists of potential graduate assistants willing to work with IUOA. If a graduate assistant was hired, IUOA would pay the student a stipend and the Department would cover the academic tuition.

In 1994, Dr. Joel Meier was hired as the Chair of the Department of Recreation and Park Administration, to be referred in this paper simply as the Department. Among the many assets Dr. Meier brought to the Department, was the Conservation and Outdoor Recreation and Education (CORE) program he had previously developed at the University of Montana. CORE is a 19 credit hour, semester-long program where outdoor recreation majors learn and practice outdoor recreation, leadership, and conservation skills in the classroom and in the field.

Besides bringing the CORE program to the Department, Dr. Meier also provided the vision of offering one-credit courses in specific outdoor skills; these courses were developed and listed as R100 courses. To initiate support and structure for the initial R100 courses, Dr. Meier insisted that nationally recognized outdoor curriculums be used. In the Fall semester of 1997 three R100 courses were offered to the student body: 1) Fundamentals of Search and Rescue (FUNSAR) was taught by a National Association of Search and Rescues instructor, 2) the WEA 18-point curriculum was utilized by a Wilderness Education Association (WEA) instructor for a seven day canoeing course, and 3) an American Canoeing Association (ACA) moving water kayak course was taught by an ACA moving water kayaking instructor.

These initial R100 courses were deemed successful and subsequently, course offerings grew from three per semester in 1997 and 1998, to six per semester in 1999 and 2000. Table 1 lists the courses that IUOA has taught since the establishment of the relationship with the Department. Twelve courses were offered during Spring 2001 and Fall 2001. Twenty-two courses will be offered during Spring 2002 (see Table 2) and Fall 2002 (see Table 3) and an additional seven courses are scheduled for the summer terms. These courses will include: wilderness first aid, backpacking, vertical caving, rock climbing, ice climbing, canoeing, whitewater canoeing and kayaking, coastal kayaking, fly fishing, snowshoeing, cross country skiing, snowboarding, and orienteering. Many of these courses have more than one section each semester.

The format for the R100 courses taught by IUOA typically includes formal classroom instruction time, local skills instruction (e.g. time at a local climbing wall, pool sessions for kayaking), weekend trip to various locales, and a final exam. The courses also include skills evaluation and a written course assignment.

Table 1

**R100 Skills Courses Taught by Indiana University Outdoor Adventures: Fall 1997 to Spring 2001**

Semester	Course Title	# of Students
Fall 1997	Fundamentals of Search and Rescue	2
	WEA Wilderness Steward Program	2
	Introduction to Flatwater Kayaking	3
Summer 1998	Whitewater Canoeing	4
Fall 1998	Introduction to Flatwater Kayaking	8
	Fundamentals of Search and Rescue	3
Fall 1999	Whitewater Canoeing	6
	Fundamentals of Search and Rescue	10
	Whitewater Kayaking	8
	Vertical Caving	12
	Coastal Kayaking	11
	Rock Climbing	12
	Spring 2000	Backcountry Snowshoeing
	Ice Climbing	7
	Mountaineering	3
	Rock Climbing	14
	Fundamentals of Search and Rescue	8
	Whitewater Kayaking	6
Fall 2000	Rock Climbing	10
	Vertical Caving	10
	Whitewater Kayaking	9
	Coastal Kayaking	10
	Backpacking	13
	Canoeing	11
	Spring 2001	Cross Country Skiing
	Ice Climbing	6
	Ice Climbing	8
	Wilderness First Aid	24
	Fundamentals of Search and Rescue	15
	Whitewater Canoeing	10
	Rock Climbing	11
	Rock Climbing	11
	Whitewater Kayaking	12
	Coastal Kayaking	9
	Vertical Caving	9
	Snowshoeing	10
<b>Total Number of Students</b>		<b>321</b>

Table 2

**R100 Courses Scheduled by IUOA for Spring Semester 2002**

Activity	Location	Dates	Cost	Max #
Dog Sledding	Ely, MN	Jan. 1-6	\$725	10
Snowboarding	Paoli Peaks, IN	Jan. 9, 16, 23, & 30	\$295	16
X Country Skiing I	Munising N.F., MI	Jan. 11-13	\$175	16
Ice Climbing I	Governor Dodge S.P., WI	Jan. 18-20	\$200	12
Snowshoeing I	Manistee N.F., MI	Jan. 18-20	\$175	18
Snowshoeing II	Manistee N.F., MI	Jan. 25-27	\$175	18
X Country Skiing II	Munising N.F., MI	Jan. 25-27	\$175	16
Ice Climbing II	Governor Dodge S.P., WI	Feb. 1-3	\$200	12
Wilderness First Aid	IMU	Feb. 2-3	\$175	25
Backpacking I	Shawnee N.F., IL	Feb. 22-24	\$150	10
FUNSAR*	IMU	Feb. 15-17	\$175	30
FUNSAR*	Hoosier N.F., IN	March 1-3	\$175	30
Whitewater Canoeing	Rio Grande, TX	March 7-17	\$575	20
Sea Kayaking	Baja, MX	March 9-17	\$900	12
Whitewater Canoeing	Frankfort, KY	April 5-7	\$150	18
Rock Climbing I	Daniel Boone N.F., KY	April 5-7	\$175	15
Whitewater Kayaking I	Frankfort, KY	April 12-13	\$175	10
Backpacking II	Shawnee N.F., IL	April 12-14	\$150	10
Rock Climbing II	Daniel Boone N.F., KY	April 19-21	\$175	15
Coastal Kayaking	Indiana Dunes S.P., IN	April 19-21	\$175	12
Whitewater Kayaking II	Frankfort, KY	April 26-27	\$175	10
Vertical Caving	Bedford, IN	April 26-27	\$150	12

\*Fundamentals of National Search and Rescue

Table 3

**R100 Courses Scheduled by IUOA for Fall Semester 2002**

Activity	Location	Dates	Cost	Max #
Wilderness First Aid	Bloomington, IN	Sept. 7-8	\$175	30
Canoeing	Lake Monroe, IN	Sept. 13-15	\$175	20
Vertical Caving	Area Pit Caves, IN	Sept. 14-15	\$175	14
Leave No Trace Ethics	Bloomington, IN	Sept. 14-15	\$175	14
Rock Climbing	Red River Gorge, KY	Sept. 20-22	\$200	16
Fly Fishing	Niles, MI	Sept. 20-22	\$225	12
Coastal Kayaking	Indiana Dunes S.P, IN	Sept. 27-29	\$200	15
Vertical Caving	Area Pit Caves, IN	Sept. 27-28	\$175	14
Rock Climbing	Red River Gorge, KY	Oct. 4-6	\$200	16
Canoeing	Lake Monroe, IN	Oct. 4-6	\$175	20
Backpacking	Shawnee Natl. Forest, IL	Oct. 4-6	\$200	16
Mt. Biking	Seneca Rocks, WV	Oct. 11-13	\$225	14
FUNSAR*	IMU	Oct. 11-13	\$175	35
FUNSAR*	IMU	Oct. 25-27	\$175	35
Coastal Kayaking	Indiana Dunes S.P, IN	Oct. 18-20	\$200	15
Rock Climbing	Red River Gorge, KY	Oct. 18-20	\$200	16
Fly Fishing	Niles, MI	Oct. 18-20	\$225	12
Vertical Rescue	Monroe County, IN	Oct. 26-27	\$175	16
Adv. Rock Climbing	Red River Gorge, KY	Oct. 25-27	\$200	16
Backpacking	Shawnee Natl. Forest, IL	Nov. 1-3	\$200	16
Survival Skills	Hoosier Natl. Forest, IN	Nov. 8-10	\$175	14
Map & Compass	Hoosier Natl. Forest, IN	Nov. 9	\$175	14
Wilderness First Aid	Bloomington, IN	Nov. 16-17	\$175	30

\*Fundamentals of National Search and Rescue

**Getting Started**

It is critical to realize that, in many cases, it may take a few years to establish for-credit recreation skills courses at an academic institution. An outdoor program will need to show that it can manage a quality outdoor recreation program before diving into the academic circle. Some departments may be more conservative and willing to change than others. Programs need to be patient in their efforts, and let the actions and track record of the program speak louder than the words the coordinator might have to say.

It may be helpful to seek out a faculty member, with a good background in outdoor recreation, that the program/coordinator can begin to build a rapport with. Contact this faculty member and share with them the great things that the outdoor program has done/is doing. Depending on the faculty member's background, it may be appropriate to ask for some feedback on the programs'

current trip and instruction offerings, staff training, and other aspects of the outdoor program. A faculty member that is able to see the benefits and progress of the outdoor program is more likely to become invested in seeing the implementation and success of academic recreation skills courses.

The Risk Management Department should already have a good relationship with an outdoor program, via such things as a risk management plan and efforts by the program to keep them informed and up to date. It might also be important to give the academic department a chance to look through the programs' risk management plan, as well as, any and all quality written materials. This further establishes the credibility and ability of the outdoor program to teach skills courses for the academic department.

## **Logistics**

Although, the logistics of teaching R100 courses have been simplified over the last four years, they still remain somewhat more demanding than the trips and courses normally offered as part of an outdoor program. One such logistic that may be out of the norm for an outdoor program is that the R100 course offerings are submitted to the university approximately a year in advance. This is due primarily to university timelines for preparing registration materials and processing courses. To accommodate this requirement, the outdoor program management is required to both plan and attempt to forecast the availability of instructors and the interests of students. While this is not really any different than what would be done anyway each semester, having to complete this planning nearly a year in advance demands a little more time, thought, and attention.

Many of the course logistics that are not university requirement/timeline bound are fairly common and in many cases are identical to those already being carried out by program coordinators. Some of the logistics to be considered in conducting R100 courses include: type of courses offered, equipment reservations, location of courses, vehicle reservations, dates of courses, course classroom session(s), classroom reservations, course budgets, enrollment maximums and minimums, instructor selection, itinerary and syllabi, and grading.

**Course selection:** For-credit skills course offerings need to reflect the strengths of the outdoor program as well as the leadership resources available. IUOA began its involvement in R100 courses in a very conservative manner. Starting conservative allows a program to develop the for-credit courses and monitor the strength of them. Like all trips and courses, these courses take time to develop and refine. A conservative start will also allow instructors to find success and develop more confidence in their role as an educator in an academic setting.

**Classroom reservations:** If a classroom is needed for indoor instruction time, please remember to consult with the academic department the courses are being offered through and find out how to reserve academic classrooms. It is helpful to do this well in advance of when the classroom will be needed. Also consider using the outdoor program's meeting space if it is suitable and has resources such as: desks or tables, white board or chalkboard, and audiovisual equipment. Classroom meetings within the outdoor programs area will help provide additional exposure of the outdoor recreation program. Keep in mind that it may also be necessary to schedule a pool or climbing wall for course instruction.

**Enrollment issues:** Maximum course enrollment numbers are difficult to estimate and manage. The reality of academic courses and the many drops and adds into courses for credit can be overwhelming and time consuming. It has taken three years to grasp the tendencies of Indiana

University students. As an example, for winter courses IUOA will submit a maximum enrollment figure that is twice as large as the program wants to accept. If a winter course will have a maximum enrollment of 8 students actually going through the course, IUOA will allow 16 students to register through the Office of the Registrar. Based on a winter course drop rate of about 50%, the course will fill with 16 students, but only half will end up taking the course; the rest will drop.

The ongoing challenge is to estimate the student drop out rate and adjust the maximum enrollment. In setting the maximum enrollment numbers for courses, it is also important to remember that students will want to add the course or seek approval to over-enroll the course after the normal registration period has ended. It is crucial to note that not all courses will have students drop. If the outdoor program has stated a maximum enrollment of 16 and all 16 students show up to take the course, the program is obligated to teach all 16. If the course was only designed to handle 8 students, a problem arises. Such is the nature of the challenges of determining optimal enrollment figures.

The outdoor program coordinator needs to thoroughly understand the academic institution's add and drop and policies and how they relate to the outdoor program's refund policies and procedures. These policies and procedures should be simple and well articulated by skills course instructors and in written course materials; this makes them somewhat easier to enforce.

**Instructors:** Skills course instructors should be chosen four to six months in advance of the courses to allow for proper course preparation. Instructors need to review the assigned textbook for the course and become familiar with the materials in the syllabi. R100 lead instructors are required to have at least two years leadership experience with IUOA and have displayed numerous competencies, such as these for whitewater kayaking instructors:

- Current ACA Whitewater Instructor certification to lead in whitewater
- Demonstrate a thorough understanding of all concepts listed in activity outline
- 7 days lead boating on at least class II water (shadow trips do not count)
- Shadow an R100 whitewater course
- Demonstrate moving water rescue techniques
- Comfort/skill on class III water
- Write a mock itinerary that allows for driving, camp set up, cooking, instructional time, and participant skill demonstration
- Possess current WFA (WFR preferred)
- Demonstrate an understanding of leadership and learning styles

More details on the R100 instructor requirements for IUOA are stated within the in-house, R100 Instructor Manual written by Tom Stuessy. At IUOA, over 80% of the R100 Lead Instructors are graduate students or college graduates who live in the area.

**Syllabi and Grading:** Each academic skills course for credit is required to have a syllabus and this should be prepared in accordance with the academic department guidelines. Outdoor practitioners are aware of the value of the outdoor experience, but may not be practiced in translating a participant's (in this case, a student's) experience into a letter grade. Instructors teaching recreation skills courses for an academic department must have an assessment tool from which they can fairly and accurately assess student knowledge and skills. Written exams on the material discussed during a course and typed reports about the students' experiences are among the most frequently used by IUOA. The instructors also utilize a skills exam that evaluates the

students' ability to perform specific skills taught in the course. Such an exam not only evaluates students' skills, but it can provide an instructor with an opportunity to give feedback and additional instruction to the student. It is important to remember that there is a subjective component to a skills exam.

### **Benefits – Students and Leaders**

Students, both leaders and participants, can realize many benefits from their participation in the R100 courses. On the surface, the benefits to student participants are not profound. As expected, the courses give them a chance to learn new skills, meet new people, and to travel. On a deeper level though, by virtue of cost and time commitment, the student participant is likely to be more invested in the process and willing to assume more responsibility than perhaps they would in any other academic class. This level of investment provides the student leaders an avenue to instill environmental and self-awareness, responsibility, as well as learning the details of a “community” and a technical skill.

To teach effectively, student leaders must be invested in both an “academic” and “recreation” attitude. This takes careful preparation and strong role modeling on the part of the seasoned leaders they will initially shadow. Careful selection of leaders must be employed as patterns of less than objective evaluations of skill and “no biggy” attitudes are detrimental to a program’s integrity.

To help prepare student leaders for this challenge, IUOA requires a resume, references, interview, policy and procedure manual tests, and shadowing at least two same skill R100 courses. Once leaders have shadowed two courses, the administration takes into account: 1) leader to leader evaluations, 2) participant to leader evaluations, 3) opportunities for potential leader to demonstrate skills and assess another’s skill, and 4) performance on manual tests.

Once the leader has successfully made it through the process many benefits are realized. Since the courses are held both in the classroom and the field, the young leader is exposed to multiple learning and teaching styles. In preparation for a course, student leaders are required to submit a copy of the trip itinerary, syllabus, and risk management plan. These responsibilities have led to a wonderful organizational and philosophical understanding of outdoor programming for many of the IUOA leaders.

In addition, student leaders are exposed to the challenges of skill and performance evaluation techniques. Since each participant does earn a letter grade, the student leader needs to be cognizant at all times of each participant’s actions and use of newly learned skills. This evaluation process often occurs while participating in the activity and keeping in mind all other controls of outdoor leadership. Further, student leaders are given far more in-depth feedback from which to improve their skills. Since a for-credit skills course is more formal than a regular outdoor program trip or clinic and they’ve paid a considerable lab fee, students are more willing to provide more feedback. This honest feedback is integral to the growth of skills, both technical and interpersonal.

## **Benefits – Financial & Programmatic**

**IU Outdoor Adventures (Financial):** In order to take a R100 course at Indiana University, a student must enroll in the course, pay the tuition, and pay an additional course or lab fee. The average lab fee for an R100 course through IUOA is \$200 and it covers expenses such as travel, food, permits, and instructor salaries. This \$200 lab fee is paid directly to IUOA via a signed student BURSAR form that authorizes the billing of the student. In addition to the lab fee, IUOA has been receiving \$30 per student from the Department of Recreation and Park Administration. This has now been increased to \$35.

To provide a basic idea of the financial benefits to the outdoor program, during the Fall 2001 semester the average gross income per course was \$2159. The average net income after paying instructor salaries, food, and transportation cost, etc. was \$825 per course. Note: at this time IUOA does not include gear depreciation and administrative costs in calculating the cost of conducting R100 courses.

**IU Outdoor Adventures (Programmatic):** Some programmatic benefits are received in addition to the dollars and cents generated by these courses. Outdoor programs are likely to see a greater overall percentage of trips going out into the field. Due to credit hour issues, academic courses are less likely to be cancelled and they help balance out low 'fill' rates from regularly scheduled outdoor program trips. Reducing the cancellation rate of trips also greatly assists in planning efforts and forecasting revenues.

The academic courses facilitate increased visibility on university and college campuses by providing a reason to interact with the program. Registering for an academic hard skills course does not require that a participant is aware of the existence of the outdoor program. Once registered, students in these kinds of activity courses are introduced to the outdoor program, its staff, and what the program is really all about. Course participants are then likely to talk to roommates and friends about the experiences that they had learning new skills.

Lastly, those participating in academic courses may decide that they are interested in what the outdoor program represents and pursue future opportunities with the program. These students may come back as participants in other courses, regular trips, or they may become involved with the program and eventually end up as trip leaders and instructors.

**IU Department of Recreation and Park Administration (Financial):** Before beginning this section of the paper it is important to point out that the methods for calculating and distributing tuition dollars within a university setting is not clear-cut by any means. The numbers used in this paper were estimated as accurately as possible, in coordination with the IU School of Health, Physical Education, and Recreation (HPER). The intent is to educate the reader and give them basic data that are considered to be as accurate as possible at this time.

Tuition for undergraduate students at Indiana University is determined by the number of credit hours taken and by the residency status of the student. Indiana residents who enroll in 12-17 hours pay a flat fee of \$2097; non-residents pay a flat fee of \$6965. If an Indiana resident chooses to enroll in any less than 12 credit hours, they pay \$131 per credit hour; non-residents pay \$435. Students who wish to enroll in more than 17 hours pay the flat tuition fee, plus the additional per credit hour fee \$131/\$435 for the number of hours they wish to add above the 17 covered by the flat fee.

In order to estimate the financial benefits to the IU Department of Recreation and Park Administration, the lead author met with a representative from the IU School of HPER. The resident and non-resident undergraduate tuition revenues to the School were combined and then divided by the total number of student credit hours. It was estimated that the School of HPER received an average of \$200 per credit hour, per student during a three-year period 1998-2001. At Indiana University, the School of HPER has chosen to credit each department with the tuition revenues they generate from their courses. The representative from the School of HPER emphasized that the calculation and distribution of these tuition monies is somewhat complicated, but that the \$200 per credit hour was as accurate as possible.

This being considered, Table 4 illustrates the magnitude of the financial benefits provided to the Department by the outdoor program. The table shows that IUOA generated approximately \$52,700 for the Department from Fall 1998 and Spring 2001. During this time period, IUOA instructed approximately 310 students in the R100 hard skills courses. This figure factors into account the \$30 per student given to IUOA by the Department.

Table 4

**Tuition Dollars (Generated by IUOA R100 Courses - Fall 1998 to Spring 2001) for Indiana University School of Health, Physical Education, and Recreation and the Department of Recreation of Park Administration**

Semester	# Students	Tuition \$
Fall 1998	11	\$ 1,870.00
Fall 1999	59	\$ 10,030.00
Spring 2000	45	\$ 7,650.00
Fall 2000	63	\$ 10,710.00
Spring 2001	<u>132</u>	<u>\$ 22,440.00</u>
	310	\$ 52,700.00

Note. The tuition figures used in this table have been estimated as accurately as possible. The tuition figures in this table represent \$200 per student minus the \$30 per student fee that is paid to IUOA, for a total of \$170 per student.

**IU Department of Recreation and Park Administration (Programmatic):** Like outdoor programs, the academic program can receive programmatic benefits from offering skills courses. First of all, by participating in a cooperative venture with an outdoor program, an academic program gains the ability to offer skills courses in some situations where they may not have had the resources otherwise to do so.

This kind of venture does not interfere with faculty course teaching loads that are often limited due to budget and time constraints. Working with an outdoor program also enables an academic program to teach courses that may be outside of the skills set of the department's faculty members.

The Department has the potential to gain increased levels of exposure on campus. This visibility can help combat the "I never knew this was a major..." statement often heard by students when they first encounter recreation and leisure studies departments. This increased exposure may also benefit academic departments by attracting new majors to enroll in their programs.

The amount of energy expended by the Department to help coordinate the paperwork and approval of these R100 skills courses has an excellent return on the investment. They are able to offer courses and receive tuition dollars, without having to provide instructors, materials, logistics, etc. This certainly is a winning proposition for the Department.

### **Future Goals and Conclusion**

Changes and updates are essential for continued quality improvement in an outdoor program. In changing or adding course offerings, it is important to consider different types of courses students might be interested in. Thinking outside of an outdoor program's traditional offerings may be a productive process for generating good ideas. Re-examining the skills and interests of the programs' staff is one way of doing this. Some examples of courses that have been added to the skills courses schedule taught by IUOA include: fly-fishing, vertical rescue, whitewater canoeing and sea kayaking in Mexico, and orienteering.

Another avenue for expansion and improvement would be to offer advanced courses for those students who have already participated in one R100 course. Advanced beginner courses in rock climbing, kayaking, ice climbing and backpacking can expand on skills already learned by participants. Refining skills and more difficult routes allow for participants to stay challenged. Another potential idea is offering courses over fall or spring breaks for 2 credit hours. Courses longer than four days, with greater time in the backcountry than the regular R100 courses, are more demanding and provide additional learning opportunities for all involved.

Staff training is on-going process as students graduate and leave academic institutions regularly. The mission at IUOA, in regards to R100 staff training, is to better prepare staff to assist on these types of courses and to groom them for lead instructor roles. With both weekend trip staff and R100 leadership, staff training is an on-going challenge and concern. The major difference is that the staff members who teach R100 courses have more responsibility in regards to skill assessment and grading. Teaching methods, as well as learning styles need to be part of the formal training effort to prepare staff to teach R100 courses.

This paper has focused on the benefits of outdoor programs working with academic programs to offer recreation skills courses to students. The authors admittedly have not addressed the costs associated with this type of venture but, in all truthfulness, they have found that the benefits far outweigh the few costs that exist. It is the opinion of the authors, that cooperative ventures of this nature are beneficial for both the outdoor program and the academic program and well worth the time and effort required to foster relationships and work in conjunction with another campus entity.

## **Biographical Sketches**

Raymond Poff is an Assistant Professor at Southwest Texas State University. Before his current appointment, Raymond was an Associate Instructor for the Department of Recreation and Park Administration at Indiana University from 1998-2001 while working on a Ph.D. in Leisure Behavior. During that same period, he also worked for IU Outdoor Adventures as the equipment purchasing coordinator and an ACA whitewater kayaking instructor. Prior to returning to graduate school in 1998, Raymond was the Recreation Coordinator managing Brigham Young University Outdoors Unlimited.

David Calvin is currently the Leisure Programs Coordinator at Indiana University and Executive Director of the Wilderness Education Association. He earned his BS in Recreation and Park Administration from Illinois State University and graduated with his MS in Recreation from Indiana University. Dave serves as the program coordinator for IU Outdoor Adventures and works closely with the School of Health, Physical Education, and Recreation instructing outdoor adventure trips for university credit. He has been working in outdoor recreation since 1992 and spends 30 to 40 days annually in the field.

Tom Stuessy is currently an Assistant Coordinator at Indiana University Outdoor Adventures in Bloomington, Indiana and is an ACA whitewater kayaking instructor. He is pursuing a Ph.D. in Leisure Behavior in the School of Health Physical Education and Recreation with a research interest in risk perception. In addition, Tom is currently serving as the Associate Executive Director of the Wilderness Education Association.

# **The Growth Of River Kayaking And Its Indirect Effect On Institutional Whitewater Programs**

**By**

**Geoff Harrison**

## **Abstract**

Institutional whitewater kayaking programs have historically been a key component of the learning process by offering low cost instruction that emphasized safety, skill, and the spirit of down river travel. During the 1990's, whitewater kayaking, similar to other sports, saw an exponential level of participant growth due to strong economic times and a mass-market media appeal. The infusion of money generated from the growth stimulated a renaissance of designs. The rapid growth of the sport has become a challenge for many institutional kayaking programs because many of the boats that were once regarded as classic teaching boats are no longer available for purchase thereby negating their appeal to the learner. This shift has made it difficult for many programs to identify good teaching boats within the sea of small boats that are taking the sport into new directions.

This paper reviews the evolution of kayaking and the current role of institutional whitewater instructional programs in the sport today.

## **Evolution of the whitewater kayaking industry**

The sport of whitewater kayaking in the United States began within small circles of adventurous friends and explorers. At its inception, the focus of the sport was on exploring river canyons that were historically impassable by conventional vessels. A growing number of home-made, and a limited number of commercially produced, fiberglass kayaks cascaded and crashed down rivers in the East, Rockies, and Sierras.

Whitewater kayaking began to garner public appeal in the mid-seventies with a few television series that documented early descents of major river explorations. Pioneers like Walt Blackadar, Cully Erdman, Royal Robbins, Don Banducci, and Lars Holbeck helped to propel the sport into the public spot light.

Participation in the sport was generally limited to a few individuals in each community until the 1990's. With an incredibly strong domestic economy, large disposable incomes, more national leisure time, and large numbers of single people in their 20's & 30's made participation in adrenaline based sports like kayaking sky rocket. Sports like snowboarding, wind surfing, and mountain biking also flourished during this era. Increased consumer consumption created the

economic base for these industries to grow. Like other industries, kayaking had the money to invest in computer aided design programs and the innovation process gathered speed.

### **Evolution of boat designs**

In the late 1970's a few commercial companies began to produce plastic, round hulled, boats that were able to withstand the abuse of river exploration. The industry, while in its infancy, supported two or three boat designs but only saw major innovations every three to five years. Classic boat designs like the Dancer and Corsica remained cutting edge for about 10 years.

The dimensions of early kayak designs were structured around the international standards for whitewater slalom competitions. However, on the slalom kayak circuit, boaters began to modify the volume of their fiberglass boats so they could master the squirt or pivot turn. These minor modifications to the original designs allowed the paddlers to do a variety of flashy tricks before races and at the early whitewater rodeos. These competitions lit the pathway to technical innovations. Boats began to be designed to make particular tricks easier for a variety of paddlers. Shapes changed and boats began to shrink in size. The first radical departure from classic boat design was the German made Prijon Hurricane; the boat was a shorter version of their 1992 winning slalom design. The Hurricane possessed lots of rocker, centralized cockpit volume and a thin, flat tail. This design excelled at both down river exploration and rodeo competitions. At this point in time the American manufacturers, departed from the classic shape and introduced their version of the German boat.

In the 1990's, kayaking began to receive an infusion of young and ambitious new paddlers. Virgin descents of remote rivers began to be run by these new paddlers. Shorter high volume creek boats and shorter low volume play boats began to appear on the scene. Dagger's release of the RPM signaled the end of traditional boat designs. The RPM was an all conditions boat that was beginner friendly, excelled at rodeo competitions, and was predictable enough to run harder rivers. At the time the RPM was introduced a small East Coast company called Savage released a radical boat called the Fury. This boat had a flat bottom, pointy upturned bow, and a wide flat tail. The Fury's strange shape allowed the boat's hull to plane on a wave and perform 360° spins on the face of both river and ocean waves. This unconventional design completely changed the kayaking industry by introducing the planning hull concept.

### **Play boat designs**

The boats in this category represent the state of the art in competition rodeo boats. They are specifically designed to aid the paddler in mastering contemporary tricks. These boats come in a variety of sizes and have flat planning hulls, sharp rails, thin ends and centralized volume. These features allow the boat to remain retentive in a hydraulic and to spin effortlessly on the face of a wave.

### **Creek boat designs**

The boats in this class are designed to protect the boater while running hard whitewater. Stable and predictable in hard whitewater these boats are designed with many safety features. They are typically short high volume boats that are intended to resurface quickly after big drops. Both planning and displacement hulls are used in these designs.

## **Tweener boat designs**

The boats that bridge the gap between big teaching boats and super low volume play boats can be termed Tweener boats. As they bridge the gap between the old and new, they try to incorporate the performance traits of both big and small boats. They are intended to be highly responsive but forgiving. Tweeners typically have a flat planning hull with a higher peaked deck shape that sheds water and help the boat resurface. These boats are intended to be good at wave surfing and general down river travel.

## **Institutional kayaking programs**

Paddlers seem to have always learned to boat from, either the school of hard knocks, a friend, professional kayak school or an institutional outdoor program. Learning through an outdoor program has traditionally been a low cost way of getting into the sport. Each individual outdoor program teaches kayaking skills that are based around the program's philosophy of the sport.

Recently, the Outdoor Program at Boise State University surveyed a total of 40 universities in the United States and Canada to quantify the number of students being taught kayaking and to identify the type of teaching boats being used by these programs.

During the 1999-2000 school year, these 40 programs taught a total of 757 instructional kayak classes to 6,809 students. The programs interviewed were selected because they taught a minimum of 2-3 classes per year and taught classes that were longer than one session in length. Each program was also asked to identify the hull type and models of boats in their fleet. Hull types were broken down into three categories: Displacement hull boats are the traditional round bottomed boats, Planning hull boats are the contemporary flat bottom kayaks that are currently in production, Transitional boats represent a combined fleet of planning and displacement hull boats.

Of the 40 programs interviewed, 23 maintained a fleet of transitional or planning hull boats. These programs taught 514 classes to 4,421 students last year. The boats used by these programs ranged from high volume flat-bottomed creek boats to low volume play boats. Boat style ranged from conservative models like Pyrahna's H2zone series to radical models like Wave Sports XXX. Many of the instructional programs in this segment of the survey represented recently formed outdoor programs. The majority of the schools in this segment transitioned to planning hull boats in between 1998-1999.

17 of the 40 programs inventoried maintained a classic fleet of boats. These programs taught 243 classes to 2,388 students last year. Most of these programs have been offering instructional programs for many years and have been slow to purchase contemporary boats. Reasons for not upgrading their fleets ranged from budget limitations to teaching philosophies. Many of the program directors believe that contemporary boat styles make it difficult for the beginning kayaker to build confidence in themselves and their newly acquired skills.

## **Teaching boats**

Classic teaching boats were long and skinny. They had round bottoms that lacked primary stability but offered the paddlers excellent stability on their sides. They roll easily and offered confidence to the learner. These relatively user-friendly designs had low deck height, which limited the size range of paddlers. Many programs found these boats increased participant's

perception of confidence and helped in getting the students to stay with the sport after their instruction. For many years, the classic teaching boats resembled the boats being sold at retail shops. This created a quiet partnership between the industry and the instructional program. Students were able to learn in a particular boat and then go purchase a similar one at the local paddle sports retailer. The slow evolution of designs worked well with institutional budget constraints. Programs could buy 2 boats a year and rotate a fleet every 5-6 years. As the sport grew in the mid 1990's, boat design concepts followed the growing sport of rodeo playboating. The boats produced during this period had features, shapes and sizes that were intended to make freestyle kayak moves possible to the general paddling population. This shift away from a traditional river running focus sold lots of boats for the manufacturers and pushed them to continue producing better play boat designs. Soon the river running designs began to have play boat features integrated into their design. Long boats with round displacement hulls became a thing of the past and were replaced by their short and flat bottom descendants.

The rapid evolution of the sport left most institutional whitewater programs with philosophical and financial struggles. The big questions centered around what the best boats were for new paddlers and how the institution could integrate new boats into their current instructional program. With a length variation of 2-3 feet, the new boats perform most skills differently than their longer counterparts; they are typically faster turning and more responsive. These traits can both help and hinder a new paddler. Since the boats perform differently, the instructor is challenged to keep their students at an equal progression.

### **Price structure**

Institutional programs are typically able to purchase their boats on special discount programs. During the 1980's and early 1990's the actual price of a boat purchased for a school program varied from company to company but averaged about \$400. Boat prices remained the same for a long time because boat companies were only developing a few new boats at a time, thereby keeping their research and design costs to a minimum. With the recent rapid growth in the sport, boat manufacturers have been pressured to release several new boats each year in an effort to maintain their market share. In a relatively short period of time, the retail prices of boats have increased by 1/3 because of the additional design costs. Indirectly, this growth has increased the discounted price that an institution pays for each boat. In the past few years, institutional boat prices have been closer to \$650.00. This elevated cost has been a challenge for many programs to rotate their boat inventory.

At the 2002 summer Outdoor Retailer Trade Show, many of the manufacturers unveiled new price point retail boat models. . Wave Sport, Perception, Pyrahna, and Dagger recognized the sudden rise in retail boat costs and decided to lower the price on several of the older models that have proven to be successful items. In addition to the new price structure the manufacturers have created a few new boats that are intended to be more beginner friendly. These boats, similar to their playboat relatives, have flat planning hulls however, they lack a play boats low volume and concave deck. The decks on these new designs are intended to shed water and remain above the surface. These new designs mark a departure from the non-user friendly play boats that have been produced over the past several years and should aid the instructional program in making the transition to teaching in modern boats.

## Summary

Whitewater kayaking is a rapidly evolving sport that has recently seen a renaissance of boat designs and an exponential growth in participation numbers. Each year, several thousand students are introduced to the sport of kayaking through instructional seminars that are offered by university outdoor programs.

The rapid growth of the sport has left many program directors wondering where their instructional programs fit into the matrix of industry standards. While many programs have joined the new age of boating by integrating modern boat designs into their teaching programs, many have been left contemplating the value of new designs versus their classic equipment. At many university outdoor programs both philosophical and financial reasons have limited the use of modern boats in their beginning kayaking programs.

Eventually, all institutional kayaking programs will need to upgrade their current equipment inventory. The values of modern equipment should only be integrated into instructional kayaking programs after the program staff has re-examined its teaching philosophy and has restructured the instructional curriculum to capitalize on the advantages and accommodate the limitations offered by the new equipment.

## References

The information compiled for this presentation and paper were derived from conversations with kayak industry professionals and program directors at over 40 universities. University references are cited in the following spread sheet.

Lesser, Rob. (Former Perception Sales Representative). Personal Interview. October 2001.

Interview Pagel, Mike. (Perception Sales Representative). Personal Interview. October 2001.

Brown, Brian. (Dagger Sales Representative). Personal Interview. October 2001

Mowery, Mike. (Necky Sales Representative), Personal Interview. October 2001.

Keyes, Ted. (Wave Sport Sales Representative). Personal Interview. October 2001.

Bishop, Kelly. (Eskimo Sales Representative). Personal Interview. October 2001.

Kudrna, John . (Prijion Sales Representative). Personal Interview. October 2001.

Toeper, Brent. (Pyrhna Sales Representative). Personal Interview. October 2001.

Stan Colby & Jo Casin (Paddlesports retail store owners). Personal Interview. October 2001

Edminston, John. (Paddlesports retail store owner). Personal Interview. October 2001.

## Biography

Geoff Harrison works for Campus Recreation at Boise State University and runs the university outdoor programs. He learned to kayak as a university student and has been an avid kayaker for the past 12 years. His passion for kayaking has him on the water 12 months a year and has enabled him to explore rivers through out the United States and Central America.

# **Trip Staff Training Practices: Survey and Discussion Results**

**By**

**Lynn Zwaagstra  
Weber State University  
Ogden, Utah**

## **Abstract**

Several panel members presented how their university program handles the issue of trip staff training practices. This included such topics as type of trip staff, required certifications, skills verification process, training curriculum, benefits, communication methods, and monetary investments. All participants then discussed these topics in an attempt to gain ideas and examine emerging standards. A survey was administered to collect data on the practices used by those who participated in this session. This paper presents both the discussion and survey results.

## **Discussion Group Demographics**

Approximately 40 people participated in the group discussion. University non-credit programs represented 80% of the participants with the remaining participants equally representing university for-credit, military recreation, non-profit, and for-profit organizations.

## **Trip Staff Demographics**

Over 70% of the discussion group offered leader/lead or educational/instructional programs. Other styles utilized to a much lesser degree included guided trips, common adventure subsidized and common adventure unsubsidized. The most common type of trip staff used by these programs was paid trip leaders at 60%. An interesting finding was that for each style of trip, programs used multiple styles of staff. Thus, you could have a paid trip leader, and unpaid trip leader, paid instructors, and volunteers all leading the same style of program. Those entering the field will be happy to hear that a large percentage of trip staff are being paid for their efforts. A flat wage was most common but virtually all types of trip staff receive additional benefits such as incentive programs, pro-deals, and covered expenses.

## **Training Curriculum and Skills Verification**

Curriculum was the one area of discussion that was agreed upon almost universally. Surprisingly enough, even programs that reported having no training program (i.e., folks who hired completely trained staff) even reported training their staff on certain topics. These topics include, in order of popularity: program policies and procedures, emergency procedures, trip philosophy, leadership and group dynamics, how to instruct or lead, basic technical skills, and equipment use and repair.

Who pays for this training? The program does! Over 75% of programs paid for the training process regardless of length.

Group discussion focused on methods of paying for training as well as ideas on how to recover expenses for folks that drop out after becoming trained. A prescreening and interview process seems to help weed out the freeloaders and unqualified individuals. In conjunction with the interview, a signed contract regarding time commitments owed for receiving the training was another possibility. If this commitment is not fulfilled, payment could be recovered for program expenses. Other ideas along these lines include grants that can be applied for, reimbursement of staff for training once they have already put in their dues, and point systems where trainees accrue points that can be used to attend more training or certification classes. One highly recommended system is a mentoring program. Out-of-pocket expenses are low, trainees gain valuable skills by shadowing competent staff members, and it even provides a method of evaluating the trainee. A win-win situation all around!

Verification of skills necessary to lead a trip came in a variety of ways. Ideas included obtaining a technical skill resume, requiring certifications such as ACA or AMGA, skills demonstration check-list, training manual with corresponding written tests, and serving as an assistant with an experienced staff member. The mentoring program goes hand in hand with skills verification. A large percent of programs are using a progression system where novices enter the program and proceed through classes, training sessions, volunteering, and assisting before actually being allowed to lead trips. Perhaps this accounts for why programs use so many different styles of trip staff for the same style of program.

### Medical Certifications

Consensus among group participants was that Wilderness First Responder was becoming the industry standard. Survey results seemed to indicate that programs currently vary greatly in their certification requirements. Results by program are listed below.

Certification Required	Leader/Lead Trips	Educational/Instructional Trips	Guided Trips	Common Adventure
1st Aid/CPR	61.5%	56.3%	50%	75%
WFA	30.8%	12.5%	66.7%	25%
WFR	23.1%	31.3%	0%	0%
WEMT	0%	6.3%	0%	0%

### Communication and Discipline

There was much discussion on how to deal with volunteers who may be inappropriate for trip leading, violation of rules by unsupervised trip staff, and behavior inconsistent with the program vision and mission. A particular topic of interest was use of alcohol on trips. Almost all programs agreed that alcohol is taboo. Most often, however, trip staff are unsupervised and may “turn a blind eye” to alcohol consumption. Group consensus was that inappropriate behaviors could not be tolerated regardless of trip staff status (i.e., volunteer vs paid). Ways to head off this behavior before it starts is to have a thorough screening process, discuss vision and mission at the onset, set an atmosphere of zero tolerance, and discipline for any poor behavior. Even volunteers can be “shown the door”.

## **Trends and Conclusions**

Most outdoor programs differ greatly due to factors such as organization size, funding, location, weather, local interests, etc. Thus, it's very difficult to compare programs and make generalizations. Having said this, group discussion and survey results show a few emerging trends. The most popular types of trips are leader/lead and instructional. The common adventure style of programming is decreasing in popularity. Programs are using paid staff with varying styles of payment, which includes incentives and pro deals. Staff are being trained in-house through a progression of skill instruction, shadowing, volunteering, assisting, and then trip leading. Training curriculum consistently focuses on policies, procedures, emergency procedures, trip leading philosophy, leadership and group dynamics, technical skill instruction, and how to teach or lead. This training progression allows programs to evaluate and assess skills in emerging leaders. Most programs required a medical certification but it varies between 1<sup>st</sup> aid/CPR, wilderness first aid and wilderness first responder. Programs believe in creative methods of using point systems and incentive programs to help attract and retain trip staff. Finally, standards of behavior must be upheld regardless of the type of trip staff used.

This discussion group and survey only scratches the surface of trip staff training practices. This author hopes to do a more complete industry survey of this topic.

## **Biography**

Lynn Zwaagstra has been in the field of outdoor recreation for over 12 years. She enjoys a variety of outdoor activities including kayaking, rafting, climbing, and hiking. Lynn has worked for the National Outdoor Leadership School, military outdoor recreation, and university recreation. Currently, Lynn works as director of the Wilderness Recreation Center at Weber State University in Ogden, Utah, and also works for the Wilderness Medicine Institute.

# Humanistic Approach to Debriefing for Outdoor Leaders

By

Jerel Cowan  
Hugh Gibson

## Abstract

Debrief of participants in an outdoor setting is a standard by which professionals pride themselves on. Professionals exhibit the experiential learning cycle, all the initiatives, icebreakers and other “tools” of the trade. When it is time to retire to our own lives and experiences, leaders have the tendency to forget what it is we basis our clients experiences and evaluations on, the task of debriefing. Debriefing of leaders is a pushed to the side as preparation for the next trip is in our minds before even leave from the first. Leaders have the responsibility to debrief themselves to provide the industry with even more efficient and effective leaders.

## Debriefing for Outdoor Leaders

Debriefing has become an important and respected component of processing a successful outdoor adventure. Many times leaders of outdoor pursuits concentrate on the planning and executing the expedition that they do not take adequate time to debrief what the experience has meant to each member of the group. As facilitators of the experience we must concentrate on pulling out what people have gained from the outdoor experience they have participated in. Through debriefing participants may be able to justify feelings and emotions, draw new conclusion, and transfer what they have learned from the outdoor activity to the everyday life (Austin, 1999). As outdoor leaders we want our participants to be able to keep a part of what they have learned and be able to use it in daily situations.

Debriefing has been defined in various ways and is used in a multitude of situations. Outdoor leaders may view debriefing as the process that is used after an experience or activity for helping the participants reflect on their experiences to derive meaningful insights (Thiagarajan, 1986). Outdoor leaders may also view debriefing as the heart of outdoor activities, because of the learning experiences is the post-analytic process (Lederman, 1992). The reflection of the activity through debriefing allows for cohesion of all the situational elements. The psychological arena uses debriefing in the area of traumatic events as to reduce the occurrence of posttraumatic stress disorder (PTSD). Psychologists ascertain that providing debriefing after traumatic incidents provides positive and potentially preventive benefits that include the minimization of occurrence of future morbidity (Sparr, 2001). Debriefing is a common tool within the business world during training and “management team meetings”. The focus of the debriefing exercise is to make the group more proactive, which provides the group the ability to be more focused on the goal, and

less focused on the faults of members within the group (Sullivan, 1996). The military also utilizes debriefing in post mission exercises to establish a step-by-step process of the exercise. This provided the military with new possible strategies as a result of the experience (Pearson & Smith, 1986). The debriefing research tells us that through debriefing participants gain many positive attributes. It provides the participant with emotional recovery from a fatal or critical occurrence (Walker, 1990). The process also allows for the participants to identify positive attributes and negative attributes within groups and the strengths of the team (Bailey, 1990). The common thread within all of the mentioned professions and research is the end results of how we process events and how they can make situational events applicable to their profession, and lives.

It must be noted that debriefing is a crucial part of processing an outdoor experience, but it is not the only part. The experiential learning cycle has the sequential stages of briefing, experience, reflection, and debriefing, application. It is very important that participants are able to reach all stages. This allows the participants the most growth and development from the outdoor adventure experience. The first stage of any experiential activity should be briefing. In the simplest form, briefing is giving the participants the needed information needed to accomplish the task at hand. At this time in the activity the experience is framed, safety and authority are established, and group goals are set (Rohnke, 1989). This is where your group starts coming together. The experience stage is doing the activity. In this stage the participants are fully engaged in the challenge whether, it be a class IV rapid, a multi-pitch climb, or a 15-mile day on the trail. The stage directly after the actual experience is reflection. During this time participants are encouraged look back at the event and construct the meaning of the experience and think “what” it means to them. After reflection, stage comes debriefing. Participants are encouraged at this time to look deep within themselves and find what the experience now means to them. The actual experience and the reflection may often contrast and this may surface during the debriefing. There are many strategies available to help people through the debriefing process (Jordan, 2001; Schoel, Prouty, & Radcliffe, 1988). This is a time where real learning and growth may occur. The final stage of the experiential learning cycle application. During the application stage the participants is hopefully transferring the learning achieved through the outdoor experience to other aspects of their lives. The using of the newly acquired skilled in daily life is the ultimate complement to any outdoor leader (Schoel, Prouty, & Radcliffe, 1988).

There are a plethora of strategies to help participants and leaders to debriefing their outdoor experiences. Group discussion such can be an effective means of debriefing (Luckner & Nadler, 1997). This group discussion can come in many forms such as round robin (everyone get a turn), popcorn, (anyone can go when they feel like it), roses and thorns (each person has to tell two positive things and one negative) and round tables. Journal writing has also been used successful to debrief (Luckner & Nadler, 1997; Fuini & Gray, 2000; Petranek, 2000). Small group activities such as dyads, fish bowls (the larger group watches a smaller group), formal and informal interviews are all possible options one may use to debrief participants. There are also creative ways leaders could debrief through the use of drawings, clay, poetry, role playing, and metaphors (Luckner & Nadler, 1997; Fuini & Gray, 2000). As one can notice, the outdoor leader has a huge variety of options in which to debrief their participants. But one aspect of debriefing that is often left unnoticed is formalized debriefing for outdoor leaders.

Outdoor leaders should be aware that debriefing is not only important for the participants but for the leaders as well. Leaders need to have mandatory debriefing for themselves, instead of just relying on just story telling. Debriefing techniques need not to be totally different for leaders than for participants. There are many strategies for participants that work just as well for leaders. Reports, evaluations, discussion with peers, informal/formal interviews, and journaling are all appropriate methods for leaders to work through what they have learned from an adventure. The

steps of the experiential learning cycle are could be viewed as more important for the leaders to learn than the participants. The learning that occurs to leaders will hopefully help with their wisdom, judgment, and decision making in the future.

The research on outdoor related debriefing is very limited at this time. Much of the information available is from the following areas: experiential education, military, marketing, emergency medicine, counseling, and psychology. Even though most outdoor leaders would consider this part of any outdoor adventure, the empirical data is not there to support that. This should be a clear sign that as outdoor leaders we need to have more discussion about how and why we are debriefing our participants. Through the dialogue much could be learned as well, we need to be researching our debriefing strategies for their effectiveness. There is much research to be conducted in the future about debriefing for outdoor leaders.

## References

- Austin, D. R. (1999). 4<sup>th</sup> edition Therapeutic recreation: process and techniques. Champaign, IL: Sagamore Publishing.
- Bailey, B. (1990). Developing self-awareness through simulation gaming. Journal of Management Development, 9(2), 38-42.
- Fuini L. & Gray, R. A. (Sept./Oct. 2000). Using debriefing activities to meet the needs of multiple intelligence learners. Book Report, 19(2), 44-48.
- Jordan, D. (2001). 2<sup>nd</sup> edition Leadership in leisure services: Making a difference. State College, PA: Venture Publishing.
- Lederman, L. (June 1992). Debriefing: Toward a systematic assessment of theory and practice. Simulation & Gaming, 23, 145-160.
- Luckner, J. L. & Nadler, R. S. (1997). 2<sup>nd</sup> edition Processing the experience: Strategies to enhance and generalize learning. Dubuque, IA: Kendall/Hunt Publishing Company.
- Petranek, C. E. (March 2000). Written debriefing: The next vital step in learning with simulations. Simulation & Gaming, 31(1), 108-119.
- Pearson, M. & Smith, D. (1986). Debriefing in experience based learning. Simulation & Gaming, 16(4), 155-172.
- Rohnke, K. (1989). Cowstails and cobras II: A guide to games, initiatives, ropes courses, and adventure curriculum. Dubuque, IA: Kendall/Hunt Publishing Company.
- Schoel, J., Prouty, D., & Radcliffe, P. (1988). Islands of healing: A guide to adventure based counseling. Hamilton, MA: Project Adventure, Inc.
- Sparr, L. (2001). Psychological Debriefing: Theory, Practice and Evidence. The Journal of the American Medical Association, 286(5), 604-605.
- Sullivan, J. A. ( June 1996). Improving small group performance. Training & Development, 50, 13-15.

Thiagarajan, S. (June 1992). Using games for debriefing. Simulation & Gaming. 23(2), 161-173.

Walker, G. (1990). Crisis-care in critical incident debriefing. Death Studies. 14, 121-133.

### **Biography**

Hugh Gibson is currently a doctoral student and graduate assistant at Oklahoma State University. He has worked as a trip leader and outdoor educator from Maine to Oklahoma. Hugh has also had the opportunity to work organizations such as Oklahoma State University, Western Kentucky University, Wilderness Education Association, municipal parks and recreation, and the US Army

Jerel Cowan is a therapeutic recreation master student and graduate assistant at Oklahoma State University. He is an accomplished climber and backpacker. Jerel professional interest includes management, working with children with disabilities, and access issues. Jerel has a keen interest in working with children of all abilities and helping them enjoy wilderness as he does.

# **The Emergence and Evolution of Outdoor Adventure Programs, 1863–2000: A History of Student Initiated Outing Programs**

(Part One of a Two Part Series)

By

**David J Webb  
Brigham Young University  
Provo, Utah**

## **Abstract**

The intent of this manuscript is to provide a history of the emergence and evolution of extracurricular outdoor adventure programs, especially at colleges and universities. The focus of this paper is on the earliest college and university outdoor adventure programs, which were student initiated outing programs commonly known as ‘Outing Clubs’.

This manuscript provides a history of how outdoor adventure programs began, especially at colleges and universities. What stimulated their coming into being? What types of administrative organizational models have been used? What trip models (type of leadership and organization on excursions) have evolved? Discovering and learning of the interesting histories and incredible impact of the outing programs known as Outing Clubs, existing from 1860’s to the present, this study of the past may challenge and change some common myths about the beginnings of outdoor adventure programming at colleges, about outing clubs, and about department sponsored extracurricular outing programs.

## **Emergence of Outdoor Adventure Programs**

Outdoor adventure programs emerged as a result of outdoor adventure recreation events; student outing clubs, institutions, and organizations; and outdoor adventure participants, educators, and leaders. Outdoor adventure recreation has evolved from wilderness exploration—climbing mountains and cliffs, running rivers, and crossing bodies of water—to more “extreme” sports—windsurfing, snowboarding and hang-gliding. Technological developments such as nylon, plastics, aluminum, titanium, and bottled oxygen have contributed to the evolution of outdoor adventure activities and have given birth to new forms of outdoor adventure. Outdoor adventure participants have always been passionate about the benefits of their wilderness and recreation experiences. During the last hundred years, outdoor adventure participation has increased proportionate to increases in leisure time, disposable income, accessibility to transportation, and environmental consciousness (Jensen, 1977, chap. 3). Miles and Priest (1999) wrote that “practitioners of adventure education are often rugged individuals, risktakers and adventurers who are iconoclasts and have little tolerance for bureaucracy and organization” (Miles & Priest,

1999, p. 43). These individualists developed organizational (Student Outing Clubs and department sponsored, funded, or directed extracurricular outdoor adventure programs) and trip models to promote and stimulate outdoor adventure programs that initially appear unique to their organization and personalities. These seemingly 'different and unique' organizational models and trip models actually have many similar characteristics and purposes and appear to be variations of a theme. These variations are separate and distinct, and some leaders and administrators become very passionate about the superiority of their organization and trip model variation over other organizational and trip models.

Outdoor adventure programming continues to spread and develop all over the world. We will focus upon its evolution in the United States. What emerges is a picture of programmatic development evolving concurrent with increases of leisure time, disposable income, transportation, environmental consciousness and social values. A charismatic leader, or one or two models, sometimes stimulates the emergence of similar models regionally. Outdoor adventure programs may have some variations but all have common values, purposes, and outcomes.

Various historical perspectives teach us more when we explore and try to understand them. Each historical study can create an opinion that gives today's events a new perspective and meaning. Much of the history of the evolution and emergence of outdoor adventure programs 1863–1980 has been lost because of the lack of published histories or research. Appreciation for those people and events of the past that contributed to the present adds value to today's experiences and information for today's decisions. The maturation of a science and profession is reflected by the quantity and quality of its research and writing. We all should challenge each of us to continue to explore the past of outdoor adventure programming and add to this history. As we discover and understand the past, we will enrich and add value to the present, possibly avoid some mistakes of the past, and more effectively collaborate for the present and future developments and evolution of outdoor adventure recreation.

### **Before and During the 1800s—Outing Clubs (1863)**

People have always treasured experiences in the outdoors, and have often reserved tracts of land and water for outdoor enjoyment and recreation. The Asiatics, Persians, Greeks, and Romans established formal gardens and outdoor sporting activities; the nobility during the middle ages held private hunting preserves and forests; and the reformers of the Renaissance developed gardens and outdoor sport activities. Throughout the ages, people have received pleasure and have sought a renewal of life through outdoor activity in nature and wilderness.

As early as the 1700s, "the conservation movement, which has had a significant impact on resource-oriented [outdoor adventure] recreation, was promoted by the romantic and artistic efforts of poets, writers, artists, photographers, explorers, and mountain climbers" (Jensen, 1977, p. 49) Some of these early conservationists included: George Catlin, William Cullin Bryant, James Fenimore Cooper, Ralph Waldo Emerson, Henry David Thoreau, John Muir, and Aldo Leopold. For example John Muir wrote, "Everybody needs beauty as well as bread, places to play in and pray in where nature may heal and cheer and give strength to body and soul alike" (Jensen, 1977, p. 19).

Governments of the United States, in greater and lesser degrees, have valued wilderness and outdoor adventure. In 1626, the colony of Plymouth "passed an ordinance that prohibited timber cutting on colony land." Between 1710 and 1872, laws were passed to protect timber, establish

hunting seasons to protect game, and preserve trees and green spaces in metropolitan areas. In 1872 “Yellowstone National Park was reserved as a ‘pleasuring ground,’ and this marked the beginning of the national park system in the United States (and the world).” President Theodore Roosevelt’s “conservation philosophy was expressed in his book *The Wilderness Hunter*, and he along with Gifford Pinchot gave significant national leadership during the late 1800s” (Jensen, 1977, p. 49). Wildlife and land management in the form of state game commissions, the national forest reserves (1891 Yellowstone Timberland Reserve) that evolved into the U.S. Forest Service, and many other laws and agencies designed to preserve and protect wilderness were established during the late 1800s and the early 1900s. During the nineteenth century, the use of “adventure and outdoors” as educational tools evolved into organized wilderness camps, summer camps, Boy Scouts, Girls Scouts, Camp Fire Girls, and wilderness public school camps and experiences.

Professors and students at colleges and universities resonated with the conservation, outdoor recreation, and preservation movements of the late 1800s and the early 1900s. Student associations, organizations, clubs, and student unions provided social, educational, and recreational opportunities for the students and campus communities. These organizations offered occasional wilderness outings and activities, but these campus involvements in conservation, outdoor recreation activities, and outdoor education opportunities as part of a larger program did not allow the focus that some desired. As a result of this desire to focus on outdoor adventure, recreation, and ecology, clubs were formed specifically for outdoor recreation, conservation, and ecology.

### **Key Factors in the Rise of Outing Clubs**

Some of the key factors that stimulated growth of Outing Clubs included: the desire to get outdoors, to explore, to enjoy climbing, skiing, canoeing; the desire to enjoy the outdoors with friends and comrades; and the clubs ability to provide training, access, and equipment that a person new to the area or sport did not have. Formation of a club facilitated friendships among those enjoying outdoor activities and stimulated and facilitated the planning and participation of trips. Anne Raphael, a member of the outing club at Mount Holyoke College from 1958–62, remembers,

the outing clubs were made up of members like me, who had been enjoying the outdoors for a long time by the time we went to college; and ones like my husband, whose Bronx neighborhood had no trees, but who had loved the Boy Scout experience. There were also members who had absolutely NO knowledge or experience in the outdoors, but who wanted some way to get away from their colleges to meet other people, especially ones of the opposite sex. The Outing Clubs tried to accommodate all these types. (A. Raphael, personal communication, March 17, 2001)

Another factor was the desire to enjoy co-education outdoor trips and camaraderie. Most colleges in the early 1900’s were not co-educational. Outing clubs were initially formed by

Early 1800s	1863 & 1864	1872 & 1873	1876	1892 & 1898
First organized wilderness camps	<b>Alpine Club (1863)</b> Williams College, MA	<b>White Mountain Club (1873)</b>	<b>Appalachian Mountain Club (1876)</b>	<b>Sierra Club (California, 1892)</b>
Wilderness recreation & education as part of organized education programs	Congress establishes Yosemite Valley as a State Park; (1864) later becomes Yosemite National Park	Yellowstone National Park is the first national park (1872)		<b>Mazamas Mountain Club (Oregon, 1898)</b>

students at men's and women's colleges who enjoyed the outdoors. Men's outing clubs formed at men's colleges, and women's outing clubs formed at women's colleges. Intercollegiate outings facilitated men's and women's outing clubs to be able to have co-ed activities and trips. Outdoor activities, songfests, and square dancing became much more enjoyable when both men and women were involved! Anne remembers that "in those years most of us were also interested in folk singing and folk dancing and square dancing and just getting to meet the opposite sex. IOCA (the Intercollegiate Outing Club Association and its associated clubs) provided a reasonably safe structured environment for us to get away from a lot of single-sex schools" (A. Raphael, personal communication, March 15, 2001).

In most of these colleges there was a real desire to visit another club whose members were of the opposite sex, even if it meant driving or traveling many miles. Thus Yale men would plan activities with Vassar or Mt. Holyoke, U of VA and Mary Washington College would get together for a trip. One rule of these outing was "no 'pairing off' to the detriment of the group." Chaperones added propriety and kept things from getting "wild" (IOCALUM News, 1982). According to Anne, Mt. Holyoke

counted on the RPI (Rensselaer Polytechnic Institute) outing club to run two major trips each year for canoe camping at Lake George. (Those trips are still held each fall and spring, but are much smaller than in the 50's and 60's.) We looked to MIT outing club and Harvard mountaineering club for training in rock climbing in the Quincy quarries and at the Shawangunks, and for winter mountaineering trips in Maine and in the high peaks region in upstate New York. Some of those students and grad students ran the winter mountaineering school at Adirondak Loj near Lake Placid for the ADK club each Christmas. Dartmouth also had a continuing program of winter sports; both snow shoeing and cross country skiing. (A. Raphael, personal communication, March 15, 2001)

### The Williams Outing Club (1915)

The *Alpine Club* (1863) at Williams College, MA founded by professor Albert Hopkins, stated its purpose as, "To explore the interesting places in the vicinity; to become better acquainted . . . with the natural history of the localities, and to improve the pedestrian powers of the members" (quoted in Morgan, 1999, p. 9). The *Alpine Club* produced newsletters, wrote trip journals, developed and built trails and summit observation towers, and named local natural features. Later at Williams College, a small group of undergraduates of the Trails and Byways committee founded the current *Williams Outing Club* (1915). The Williams Outing Club's aims, according to the club's constitution, include"

. . . To stimulate participation and appreciation for outdoor activities . . . To further the ideal of college education, develop personal initiative and leadership, promote skills in

1904–1908	1909–1910	1914	1915–1916	1917–1918
<b>Williams Trails and Byways Club (1904)</b>  National Audubon Society (1905)  American Nature Study Society (1908)	<b>Dartmouth Outing Club (1909)</b>  Boy Scouts of America (1910) and Camp Fire Girls (1910)	WW I begins in Europe	<b>Williams Outing Club (1915)</b>  National Park Service (1916)	United States enters WW I (1917)  Armistice ends WW I (1918)

outdoor recreation, educate itself and the college community about environmental conservation, seek new opportunities for outreach, and encourage the meeting of people with common interests. (quoted in Morgan, 1999, p. 9)

“In its early years, the Outing Club devoted itself primarily to winter sports. . . . For a time, the club itself fielded a highly successful winter sports team, capturing the 1925 Intercollegiate Winter Sports Championship for the United States and Canada. In 1923, the Outing Club took charge of the college’s annual Winter Carnival, an event that the [WOC] continues to chair today” (Giller, 1993). In 1927 substantial effort was begun to clear, mark, establish, and document trails, and in 1934 the club’s first cabin was constructed. By 1949 the WOC membership had expanded to encompass almost one-quarter of the student population and welcomed the rest of the student population on many of the events and outings. In 2001, the Williams Outing Club provides new student orientation trips, equipment rentals and resources, and a climbing wall; facilitates and organizes activities and trips, maintains WOC wilderness cabins and trails, offers numerous classes for Physical Education credit (since 1979); and produces an excellent hiking and trail guide of the region (Giller, 1993).

### **The Dartmouth Outing Club (1909)**

The *Dartmouth Outing Club* (1909) was established to, “Further, through good fellowship in the out-of-doors the educational objectives of Dartmouth College by stimulating an appreciation of nature, and knowledge of the fundamental crafts of outdoor living, the creative use of leisure time, and, above all, the development of such personal traits as initiative, integrity, self reliance, and leadership” (DOC Constitution). Within two months of its founding, the DOC had registered over sixty members and was having regular afternoon and weekend snowshoe, and ski outings. A Winter Carnival was held with over three hundred spectators watching participants of winter sports events including: tug-o-war on skis, ski jumping, and snowshoe races. This Winter Carnival proved so successful that it was soon scheduled between semester breaks, lasting two to four days, was attended by the City of Hanover community in general and the Dartmouth College community in specific and culminated with a co-ed Outing Club Dance.

John Edgar Johnson—Dartmouth alumni, Episcopalian Minister, and a widower without children or near relatives—gave his ten-acre farm to the DOC in 1913 to be used as an outing and health resort (Hooke, 1987, p. 11). This was the beginning of many financial gifts from Johnny Johnson

1919–1929	1930–1934	1935–1939	1940–1954	1955–1962
<b>Penn State Outing Club established (1920)</b>	<b>Allegheny Outing Club (1930)</b>	<b>Adams State College, CO Outdoor Program (1935)</b>	<b>IOWA Mountaineers Club (1941)</b>	<b>U of Florida (1955) and Oneonta Outing Club SUNY(1955)</b>
White House Conference on Outdoor Recreation (1924)	<b>*Intercollegiate Outing Club formed (1932)*</b>	Wilderness Society (1935)	United States enters WWII and Outward Bound begins in Wales by Kurt Hahn (1941)	Multiple Use Act Passed (1960)
Stock Market Crash (1929)	A. Youth Hostels (1932)	New York U. offers courses in recreation (1936)	WWII ends (1945)	Colorado Outward Bound (1962)
	Civilian Conservation Corps (1933) builds trails	WWII begins (1939)	Conservation Education and Outdoor Education Associations begin (1953)	

that provided funds for the construction of several cabins along trails (three cabins established by 1913) and operational funds for the DOC. After participating with the DOC events, other colleges began forming their own outing clubs. DOC assisted in the 1914–15 formation of outing clubs at the University of Vermont, Colgate, Yale, and Tufts. By 1920, DOC had become the Dartmouth College’s largest single organization. The club facilitated trail building, cabin building, the largest social event of the year (the Winter Carnival), the canoe and boat house, and projects propagating fish and game.

In 1928 approximately 80 percent of the Dartmouth faculty, staff, and students were members and used the DOC’s 14 cabins, 150 miles of trail, 3 large ‘houses,’ ski-jump hill, pond, and participated in the afternoon, weekend, recreational, and intercollegiate events organized, sponsored, and promoted by the Dartmouth Outing Club. Today the Dartmouth Outing Club continues to provide outdoor recreation opportunities and leadership skills to students at Dartmouth and other colleges.

### **The Allegheny Outing Club (1928)**

The *Allegheny Outing Club* (1928) evolved from the Tingley Biology Club (1913) and the informal, women only Hiking Club. The Tingley Biology Club, organized to combine educational experiences in the field with social fun, had been sponsoring numerous outings, hikes, and picnics. Miss Cora LeRoy, Physical Director at Allegheny and a founding member of the Syracuse Outing Club, helped in the organization of the Allegheny College Outing Club (AOC) in 1928. AOC, initially as a club only for women, evolved in 1935 to become co-ed and served a two fold purpose from 1935–1960: “to provide a program of organized outdoor activities for students; but also . . . to provide a cadre of volunteers to oversee and maintain Bousson [Woods]” (D. Skinner, personal communication, December 20, 2000).

Bousson Woods, seven miles east of the college, was 238 acres with virgin timber, beaver dam and pond, and a small lake (D. Skinner, personal communication, December 20, 2000). Allegheny Outing Club sponsored many outings and activities each year in and around Bousson Woods, including trail building and activities at two cabins. “In the years after World War II, the

club was active and large as returning veterans enjoyed going to Bousson” (J. E. Helmreich, personal communication, April 26, 2001). In 2001 the Allegheny Outing Club sponsors hiking, camping, winter camping, cross-country skiing, snowshoeing, canoeing, caving and other trips as well as a equipment rental operation.

### The Intercollegiate Outing Club (1932)

The first *Outing Club Conference* was held in 1928. Twelve northeastern colleges sent delegates who met at Dartmouth to discuss outing club organization, membership, equipment, winter sports

1963	1964	1965	1966	1967
<b>N. Alberta Institute Tech Outdoor Pursuits (1963)</b>	<b>Bowdoin College Outing Center– ME (1964)</b>  The Wilderness Act passed	<b>N. Dakota State U. Outing Center</b>  NOLS founded  US very involved in Vietnam War	<b>Portland State U. Outdoor Program</b>  Endangered Species Act passed	<b>U of Oregon Outdoor Program,</b>  <b>Outdoor Recreation Club at Lawrence University, WI</b>

competitions, and other matters of mutual interest. The conference would help pave the way for the creation of Intercollegiate Outing Club Association, which would be founded almost four years later.

In subsequent years various exchange trips, and attendance at each other’s outings and meetings lead to the formation of the *Intercollegiate Outing Club Association (IOCA)* in 1932. Fourteen college outing clubs formed the association. Ellis (Elly) B. Jump (Dartmouth, 1932) was a rare individual with social and outdoor recreation interests at heart. Elly was prominent in the best organized outing club, the Dartmouth Outing Club. At this time, the DOC had more than enough equipment and programs of its own to satisfy the interest of its members. Elly thought that many other individuals in the region would like to participate in similar activities. Although the DOC opposed the idea of a conference of existing outing clubs, the idea prevailed.

More than exchanging ideas, the delegates at the 1932 conference planned joint activities with various outing clubs for throughout the year, and most of all, planned a “College Week.” This idea of setting aside a place and a time each fall before the opening of colleges for a week or so of mountain climbing, camping, canoeing, campfire songfesting, and evening square dancing was met with enthusiasm. College Week, as was the keynote of most IOCA activities, was very informal—just name the approximate time and place and let individuals and groups use the location as a base of activities (Peterson, 1955).

IOCA grew to include 30 college outing clubs in 1935, 35 clubs in 1938, 70 clubs in 1949, 88 clubs in 1955, 103 clubs in 1957, and 107 clubs in 1967. IOCA has had membership at various times of 212 different outing clubs during its sixty-eight plus year history. IOCA promotes fellowship among members of the various clubs, organizes a few group trips, and exchanges information. Since 1932, IOCA has grown and changed, but those purposes still hold true.

## Organization and Rules

“Through the years, the unique un- (not dis-) organization of IOCA has acquired traditions (not rules . . . IOCA has no rules, nor any constitution).” These traditions included: no firearms, no pairing off to the detriment of the group, and no alcohol or drugs—most experienced outdoorsmen and women agree that the out-of-doors is not a safe place to be drunk or stoned. IOCA trips are where you get together to have fun with others, not just other. Traditions of songfesting, square dancing, and outdoor adventures are also quite famous (Levine, 1972, p. 1–2). Anne Raphael remembers that

The rules were pretty clear—no drinking, no drugs, no obvious pairing off in couples, and no display of wealthy clothing or other status symbols. We were basically a bunch of egalitarian nerds who had rejected the fraternity/sorority lifestyle and opted for outdoor recreation instead.

1968	1969	1970	1971
<b>Poly Escapes at Cal Poly SLO-CA, Outdoor Program at Boulder, CO Challenge Prog. At Rhode Island College</b> National Trails Act Passed Endangered Species Act passed	<b>U of the South-TN, U of Victoria-BC Canada, Western Washington U., Westfield State College-MA all start outing programs</b>	<b>U California Santa Cruz, U California Santa Barbara, Clemson U.-SC, Georgia Tech, Idaho State U, U North Carolina Charlotte, Washington State U, West Virginia U-Morgan Town,</b>  Environmental Education Act passed	<b>U Cal Davis, U Montana-Missoula, U Nebraska-Lincoln, Oregon State, San Diego Aquatics Center</b>

There was certainly some reverse snobbery—most of those schools had a lot of students from very wealthy families, but faded jeans with holes in the knees were a standard uniform. (A. Raphael, personal communication, March 15, 2001)

The central organ of the IOCA is its executive secretary. . . . to provide intercommunication between individual clubs, to publish a tentative calendar and to reflect and rehash IOCA activity” (Puchtler, 1959, p. 2–3). The Executive Secretary has no decision-making duties. “Informality and lack of organization was the official policy, and the executive secretary served only to keep the outing clubs in touch with each other enough that the clubs could arrange joint trips or IOCA trips, and help each other with various operational problems. (Hawley, 1962, p. 3)

## Chaperones

“There is an old adage which says that a good chaperone should see nothing, hear nothing and say nothing. From the point of view of the chaperone, the ideal situation would be where officially there would be nothing to see, nothing to hear and nothing to do.” So why have chaperones? First, if there were an accident, “the report of an adult at the scene would do much to minimize the criticism that might otherwise come from the deans of the schools involved.” Second, if some indifferent individual should bring alcohol, or behave thoughtlessly or crassly, “an adult may be able to deal with this situation in a way that would avoid criticism” (Winkler, 1961, p. 12–13).

## Transportation

Transportation for outings between the 1920s and the 1970s ranged from train, bus, bike, thumb, or foot. "In 1925 very few students had automobiles. In fact, if a student was getting scholarship aid he was forbidden to have an automobile in Hanover. The streets were not plowed in the winter. Horses with sleds or sleighs made a track down the road and that was that. Skiing started at the back door of the dormitory and went down the road, across the fields, over the fences, across the brooks, up and down hill until returning home" (Hank Lamb, quoted in Hooke, 1987, p. 392). As a result of much access to local transportation, many of the trips were to local wilderness areas that could be reached by snowshoe, ski, foot, or canoe. In 1928 charter buses were beginning to be used by outing participants to travel to the hiking, climbing, skiing, camping, canoeing sites, as well as personal cars being used by the lucky few (Hooke, 1987, p. 392). When Anne Raphael was attending Mt. Holyoke College,

students were not allowed to own cars until the second semester of senior year, when the administration acknowledged that students needed transportation to get to job interviews. The outing club owned a large station wagon with a roof rack for carrying canoes. That wagon got us all over New England for various trips. Also, we counted on students from other colleges to let us share rides to outing club trips. We shared gas

1972	1973	1974	1975
U Cal San Francisco, Illinois St., Iowa St., U of Nebraska, Southern Oregon U., U of Wis-Stevens Point	Appalachian State-NC, U of Penn-Edinboro, U. Hawaii, U. Idaho,	Bemidji State-MN, Central Washington-Ellensburg, Duke U-NC, Georgia State-Atlanta, U of Maine, Montreat College-NC Pacific Lutheran U-Tacoma WA, San Diego State U-CA, Southwest Texas State U-San Marcos TX  AEE founded	13 Outdoor Programs started- AK, CA, IA, NC, CO, MT, IL, WI, NJ, IL, TX, MD, UT

costs, and occasionally helped to push some of those very old cars out of snowbanks and ditches. (A. Raphael, personal communication, March 15, 2001)

During World War Two, gasoline rationing significantly reduced the ability for more distant trips by outing programs. The trains were very popular because of the ability to have social activities occurring while traveling to and from a recreation site, the trains traveled most everywhere, and were relatively reasonable in cost for an individual or a group. Some outing clubs would operate station wagons, hearses, or buses to provide transportation from the trains or college to the outing sites.

## Equipment

Equipment for camping and such was what the woodsman and wilderness traveler would use and get at the local stores. By 1946-47 a vast amount of army surplus boots, packs, sleeping bags, jackets, gloves and many other army surplus items were widely used by Dartmouth Outing Club participants (Hooke, 1987, p. 406-7). Anne Raphael recalls that outing clubs had little money and "scrounged equipment and bought stuff at Army-Navy surplus stores, and they drove en masse in converted hearses and busses and station wagons to hikes and rock climbing areas and caves in the Northeast and some close parts of the south" (A. Raphael, personal communication, March 17, 2001).

## Activities

Activities were bring-your-own-food-and-equipment for (in order of preference) mountain climbing, swimming, canoeing, skiing and sailing (Malcolm, 1959, p. 1). Songfests (singing around the campfire) and square dancing almost always occurred in the evening. Songbooks, musical instruments, and persons to ‘call’ the square dance were almost always present. During 1949–53, the Syracuse Outing Club averaged ten activities per week! They included ice-skating, swimming, hiking, bike hiking, horseback riding, trail building, cabin building, folk singing, over-night hiking, camping, canoeing, mountaineering trips, square-dancing, orienteering, rock climbing, archery, caving, and more (Glassner, 1996, p. 6).

During the 1950s, various schools initiated training sessions for caving, mountain climbing, and rock-climbing to increase safety and pleasure of the club member and non-club member outing participants. Many times a mountaineering or caving club (such as the Harvard Mountaineering Club) whose members were focused on one outdoor sport, and who had developed considerable training, would provide training for the outing club members.

The first IOCA rock climbing school was held in the Schawangunks on the weekend of November 19<sup>th</sup> [1957]. Climbers from Alfred, Cornell, Mt. Holyoke, MIOCA, MIT, Princeton, Syracuse, and Yale attended the weekend.

1976	1977	1978	1979	1980
6 Outdoor Programs started-SD, NY, CA, MN, TX, WA,	10 Outdoor Programs started-CA, CO, NY, IN, IO, KA, OR, WV, UT, WA  WEA started	10 Outdoor Programs started-AB-Canada, CO, IA, WI, OH, MT, OK, ID, WI	5 Outdoor Programs started-AK, CA, MI, VA, NC	5 Outdoor Programs started-CO, CA, CA, FL TX,

MIT, who has leaders to maintain its own training program, made a great contribution of leadership by taking folks on climbs and sharing their leaders. This is an example of a club’s helping IOCA with little to gain for itself, except inner satisfaction (Bond, 1957, p. 5).

Building and maintaining trails and cabins was another popular activity of the outing clubs. The Allegheny College cabin, located seven miles east of Meadville, Pennsylvania, could sleep thirty-five to forty people. This cabin featured a wood cook-stove, a large indoor fireplace, and a large outdoor fireplace (D.Skinner, personal communication, December 2, 2000). Cornell University’s “Caroline Cabin” slept ten to fifteen people and had wood stoves, a water pump, but no electricity (Lookin’, 1962, p. 15). The Williams Outing Club built their first cabin, the Harris Memorial Cabin, in 1934 (Giller, 1993).

The following statements describe some values and feelings of outing club organizations and participants:

The Intercollegiate Outing Club Association is a group of college outing clubs organized to promote interclub activity. Out of this combination has grown a feeling for a set of basic concepts of outing club spirit. Experience has shown that we have the best time by conducting ourselves according to certain principles: faith in our own

ingenuity, belief in-group spirit, and a sense of genuine comradeship. We have learned to be self-sufficient outdoors, and to enjoy ourselves without the artificiality of alcohol. Recognizing the ill effects of pairing off, Intercollegiate Outing Club Association activities are specifically designed to further the ideal of group participation and personal contribution. Our most valuable asset is the feeling of sincere friendship that binds members and welcomes newcomers.

Outing club teaches us the skills and techniques important to any outdoorsman . . . it gives us an attitude of unselfish love for the hills and streams and for our fellow man who we share them with. . . .

We derive no more from outing club than we put into it. There is no more thrilling experience than doing together. . . . The warm closeness of nature; the moving presentness of tree, sky and lake possessing infinite direction and beauty, these are all shared through companionship and teamwork. (Bond, 1959, p. 16)

IOCA had a marked effect on my life. . . . I hope those kindred souls who enjoy the out of doors, and song fests, good music, square dancing, and hiking in the mud and rain, and the ingenuity of coping with the unexpected that makes for the fun and friendships of IOCA. . . . I don't want to see the organization develop any more than just to provide the necessary framework for helping various colleges, promoting trips, etc. (Gilbert, 1998, p. 10)

The first IOCA Conference and all the many that have followed have had a profound effect on the colleges in the Northeast. A large number of new outing clubs have been started, old ones revitalized, and more and more people enabled to enjoy all the outing clubs and the IOCA stand for. Last, but certainly not least, have come the lasting friendships formed. (Bailey, 1950)

1981	1882	1983	1984
5 Outdoor Programs started—CA, IL, TN, MN, WI	5 Outdoor Programs started—AK, UT, LO, MN, MI	9 Outdoor Programs started— MA, CO, MT, NV, NC, IN, CT, WI	9 Outdoor Programs Started—AL, AL, NC, GE, NY, FL, TX, UT, UT

### Organization and Trip Models

Clubs were usually organized by students, who created a club charter outlining the values, purposes, and organization of the club. This charter was often sanctioned by the college, and a club advisor and/or chaperones were recruited by the members to assist the club. Funding, equipment, activities, and instruction came from club dues, shared trip costs, and donations from club members and activity participants. In most clubs, the members democratically decided upon certain events and activities, and the club officers facilitated, assisted, organized, communicated, and helped implement the decisions of the club members.

The trip models used by the clubs were diverse and incorporated all of the trip models in use today. Attempting to define trip models with definitions used in clubs is not possible because the clubs did not define or make an issue of the trip organization. The definition of trip models and outdoor program organizational models did not begin to occur until the 1970s, and debate continues today by some regarding the definition of terms and the superiority and inferiority of various trip models.

## **Common Adventure**

The most used trip model was that of a group of club members and/or non-members democratically organizing and going on a trip. Costs were shared, group decisions were made, trip members accepted stewardship of duties to accomplish the group and trip goals. There was no chaperone, college employee, or club officer on the trip with or without an implied or specific duty or training to ensure that club college, safety, or legal guidelines or laws were complied with. Trip participants shared equal responsibility in common with one another, no one person had a greater duty or responsibility. This trip type would later be named a *Common Adventure* trip model.

## **Cooperative Wilderness Adventure with Facilitator**

The second most used trip, one I call a *Cooperative Wilderness Adventure with Facilitator* trip model, would be similar to common adventure, but with one difference. As a trip *participant*, not as a trip 'leader', a chaperone, college employee, or possibly a club officer would participate on the trip with or without an implied or specific duty or training to ensure club, college, safety, or legal guidelines or laws were complied with or utilized. The facilitator's presence and implied, non-implied, or specific duty gave them a responsibility not shared by the other trip participants. The facilitator might have a portion or all of their trips costs paid through shared trip costs shared by the other participants. A group of club members and/or nonmembers democratically organized and went on a trip. Costs were shared, group decisions were made, and trip members accepted stewardship of duties to accomplish the group and trip goals.

## **Cooperative Wilderness Adventure with Leader**

The third most used trip, *Cooperative Wilderness Adventure with Leader* trip model utilized democratic decision making by the trip participants, a sharing of costs, a facilitator with implied or specific duties, and a person or persons with superior training and experience giving strong leadership, direction, training and guidance to accomplish the goals of the trip. The leader might have a portion or all of their trips costs paid through shared trip costs shared by the other participants. A group of club members and/or nonmembers democratically organized and went on a trip. Costs were shared, group decisions were made, and trip members accepted stewardship of duties to accomplish the group and trip goals.

## **Guided/Packaged Trip**

*Guided or Packaged* trips, the least used trip by clubs, had little democratic decision making by the trip participants as the trip was pre-planned and pre-organized. Costs were shared by the participants and possibly subsidized with club dues. A chaperone, college employee, or club officer might have a portion or all of their trips costs paid through trip costs shared by the other participants. Strong leadership from club members, and/or college employees or paid guides would facilitate instructional and/or group trip goals.

Most outdoor clubs and trip participants gravitated to the least bureaucratic, and most democratic group and individual processes for organization, event, and trip operation. A few clubs, like the Dartmouth Outing Club, acquired substantial funds, property, and event sponsorship. Greater bureaucracy in oversight and club organization existed and was prudent in clubs with substantial

funds, property, and event sponsorship to protect and ensure the continued success of those events, funds, and property. Many outdoor clubs, especially small ones or at small schools, struggled to develop traditions and individuals that enabled the outdoor club to continue. Because of the transient nature of students and club officers and the changing interests of a college or society in general, clubs were able to perpetuate themselves if the outdoor club had developed through its members a tradition of service, frequent trips, and a shared passion for outdoor adventure and conservation.

### **Key Factors in the Decline of Outing Clubs**

The societal changes of the 1960s brought a decline to IOCA and Outing Clubs. Perhaps the first factor in the decline of outing clubs was the rise of the “do your own thing” ethic which directly clashed with IOCA and outing clubs aim of fostering group activities and togetherness. More people began camping, but many of them looked with suspicion on anything “organized.” A second factor was the increased ownership of automobiles by students. Outing clubs had facilitated transportation, but with many more students owning cars, the organization of transportation service was not as important (D. Skinner, personal communication, December 20, 2000). The third factor was the sexual revolution in the colleges. As colleges integrated gender, the need to visit another club whose members were of the opposite sex lessened. Lastly, some of the people who might usually be serving in the leadership of outing clubs were busy leading political Vietnam protest groups.

### **Conclusion**

Outdoor adventure and outdoor recreation, outdoor adventure skills, personal and social development, conservation and protection of the wilderness, and memories and friendships have been hallmarks and legacies of outing clubs for over 150 years. Student-created outing clubs were likely sanctioned at three hundred to five hundred various colleges and universities in the United States. The influences of wilderness appreciation, participation in outdoor recreation, and conservation of natural resources and our environment by those tens to hundreds, sometimes even thousands, of participants at outdoor programs in clubs is staggering! The Dartmouth Outing Club (1911), Williams Outing Club (1915), Allegheny Outing Club (1928), The Wisconsin Hoofers (1931, U. of Wisconsin–Madison) and other outing clubs continue to adapt to the students interests and thrive, providing outdoor and service learning to students and participants today. Today and in the future, a diversity of outing experiences are being provided by a wide variety of outing clubs at many colleges and universities across the United States.

(Part Two will review the period of time from the 1960’s to the present, with a focus on the outing programs sponsored by institutions, usually with paid facilitators, managers, directors. Part Two will be presented at a future ICORE.)

*Copyright 2001 by David J Webb*

***ALL RIGHTS RESERVED.*** No part of this paper and presentation materials may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording or any information storage and retrieval system now known or to be invented, without permission in writing from the copyright holder, except by a reviewer or researcher who wishes to quote brief passages.

## References

- Bailey, Dick. (1950, January–February). IOCA Newsletter.
- Bond, Tim. (1957, November). Leadership programs. IOCA News.
- Bond, Tim. (1959, April). Cornell outing club. IOCA News.
- Glassner, Marty. (1996, September). SUOC & IOCA—A personal history. IOCALum News.
- Gilbert, Janet. (1998, July). The founding of IOCA. IOCALum News.
- Giller, Jeremy. (1993). A brief history of the Williams Outing Club. Unpublished manuscript.
- Hawley, D. (1962, May). Once upon a time, years and years ago. The IOCA Newsletter. 23.
- Hooke, David O. (1987). Reaching that peak: 75 years of the Dartmouth Outing Club. Canaan, NH: Phoenix Publishing.
- ICOALum News. (1982).
- Jensen, Clayne R. (1977). Outdoor recreation in America: Trends, problems and opportunities. 3d. Ed. Minneapolis: Burgess Publishing.
- Levine, Al. (1974, December). IOCA. IOCA News. 35.
- Lookin' for a place to have a trip? (1962, fall). IOCA Bulletin.
- Malcolm, Dave and Wejer. (1959, August–September). All-alum 25<sup>th</sup> reunion. ICOALum Newsletter.
- Miles, John C., & Priest, Simon (Eds.). (1999). Adventure programming. State College, PA: Venture Publishing.
- Morgan, Willard S. (Ed.). (1999). Williams Outing Club: North Berkshire outdoor guide. Williamstown, MA: Williams Outing Club.
- Outing club. (1928, December 12). The Campus of Allegheny College.
- Peterson, Gunnar. (1955). The outing club handbook. Chicago: George Williams College.
- Puchtler, Bertold. (1959, March). IOCA News.
- Winkler, E. W. (Pop). (1961, Winter). Thoughts on IOCA chaperones. IOCA Bulletin.

# **Avalanche Awareness: Safe Travel in the Backcountry**

**By**

**Dr. Steve Kugath  
Brigham Young University – Idaho  
Rexburg, Idaho**

## **Abstract**

Last year 33 people were killed in avalanches here in the United States (176 worldwide). This number reflects a frightening trend that indicates an increase in fatalities of more than 600% since the 1950s. New equipment providing easier access and the rising popularity of wintertime backcountry pursuits have contributed to recent increases in accidents. Basic information on mountain terrain, weather, snowpack and human factors can encourage awareness and the need for receiving additional hands on training. This paper shares accident statistics, outlines avalanche protocol for safe travel in the winter backcountry and a sample analysis of an avalanche fatality with a follow-up analysis.

## **US Avalanche Fatalities 2000-2001**

The following statistics represent avalanche fatalities from July 1, 2000 to June 30, 2001 by activity in the United States:

1. Backcountry Skiers = 5
2. Out of Bounds Skiers = 5
3. Backcountry Snowboarders = 2
4. Snowmobilers = 15
5. Climbers = 2
6. Other Recreation = 4

Total US Avalanche Fatalities (2000 – 2001) = 33

## **Terrain**

### **Terrain – Is the terrain capable of producing avalanches?**

Slope angle: Most releases are between 30 and 45 degrees

Slope aspect: May effect wind loading and warming by sun

Terrain roughness: natural anchors on the slope such as trees and rocks may keep the snowpack from sliding

Slope shape: Convex? Concave?

## **Weather**

### **Weather – Is the weather contributing to instability?**

Precipitation: Type, amount, duration & intensity

80% of all avalanches occur within 24 hours of new snow

Wind: Direction, Speed & Duration

Wind can move snow on the ground up to 10 times faster than it can fall from the sky

Temperature: Air & snow temps and solar/terrestrial radiation effect snowpack & bonding

## **Snowpack**

### **Snowpack – Could the snow slide?**

Layering & Bonding: Whats happening between layers in the snowpack?

Depth & Surface Hoar: Hoar creates ball bearing like lubricant between snowpack layers

Snow metamorphism – Temperature gradient snow (sugar snow) discourages a strong bond

Shooting cracks and whumpfung sounds indicate collapsing (weak) layers

Stability evaluation tests to assess snowpack:

1. Ski pole test
2. Shovel Shear test
3. Rutschblock test
4. Cornice Cutting

## **Human Factor**

**Humans are influenced by many factors that shape the decision making process such as:**

Attitude

Assumptions

Skill level & training

Equipment

Ego

Communication

Denial

Summit Fever

Peer Pressure

## **Backcountry Travel Techniques: While Ascending**

Travel with partners

Favor Gentle slopes

Watch for terrain traps

Avoid long traverses with steep slopes above

Where possible follow ridgelines

Utilize protected areas such as woods and boulders

## **Backcountry Travel Techniques: While Descending**

Begin with 2 or 3 ski cuts across the top of a run  
Favor the sides of slopes for quicker escape  
Ski one at a time & carefully observe partners progress  
Stay with in sight of one another (Spot)

## **Backcountry Travel Techniques: Crossing Avalanche Terrain**

If slope is uniformly steep cross as high as possible  
Traverse slightly downhill to cross more quickly  
Remove ski retention devices  
Loosen pack if extremely heavy (may cause you to sink in a slide); keep on if lighter (may protect your back in a slide)  
Cross one at a time and spot each other

## **Backcountry Equipment**

Shovel  
Beacons  
Probe (Ski poles/Probe pole)  
Snow Saw & Test kit (  
First aid kit  
Rope (belay & cutting cornices)  
Webbing

## **Survival – What to do if caught in a slide**

Yell to get the attention of your partners  
Discard cumbersome equipment  
Make swimming motions; try to stay on top & grab trees, bushes, rocks to stabilize your self  
As the slide begins to slow fight to reach the top  
Attempt to get a hand above the surface so that it might be seen by others  
Breathe in deeply until the snow has settled around you  
Try to create an air pocket if possible in front of your face  
Do not try to extricate yourself unless you can see light through the snow  
Try to remain calm and save your air

## **Search Techniques**

Watch the avalanche victim - careful observation will drastically decrease the search area  
Is the scene safe or might you trigger another slide?  
Don't go for help – if you do you'll be doing a body search (Call if you have a cell phone)  
Turn all beacons to receive  
Identify the spot last seen and look for visual clues  
Initiate electronic search  
Spot probe around likely areas such as boulders and trees  
First aid - The victim will probably need treatment following a successful recovery

## **Avalanche Incident Analysis**

Vail Pass, Colorado: December 31, 1995: Dale Atkins: Colorado Avalanche Information Center

1995 ended on a sad note for the family and friends of a 23 year-old snowboarder who was buried and killed in a very small avalanche he triggered near Vail Pass, Colorado.

The Tennessee man and his wife were vacationing Colorado when, for some unknown reason, he decided to ride a steep slope immediately adjacent to the interstate highway, I-70, 3.6 miles west of the summit of Vail Pass. That morning the Vail Ski Area reported 14 inches of new snow had fallen onto a thick, well-developed layer of surface hoar crystals that formed during a 10-day dry spell. Natural avalanches had been running on all aspects below at all elevations, both above and below tree line.

Alone, he was dropped off on the side of I-70 by his wife. From the highway he walled through thigh-deep and deeper snow across a shallow creek drainage and then climbed 400 vertical feet up a steep east-southeast facing slope well below tree line. During his climb he caused extensive cracks to shoot out from his tracks. At the top of the slope he started down, ridging his snowboard in the deep powder and causing additional cracking in the snow. In addition he caused two minor slabs that moved only about a dozen feet or so, but he kept going. Near the bottom of the slope he triggered a very small soft-slab avalanche that tipped him over and buried him, or at least his head and chest.

The avalanche was only 1' deep by 30' feet across, and it fell less than 100 vertical feet. The debris did not end in a gully nor did it pile up. The debris was just deep enough to bury him. It seems that a part of him or his board stuck out from the snow; the tracks from the rescue team went straight to the victim's hole. The avalanche was not witnessed, and it was not until his wife's return later to pick him up that she noticed what had happened. He had been buried about 4 hours and was dead when found by the rescue team.

### **Questions to Ask**

What were the signs that the snow pack was not stable?  
What other mistakes did this snowboarder commit?

### **Incident Analysis**

1. Snowboarder was the trigger
2. Steep slope - Most common 30 to 45 degrees
3. 14 inches of fresh snow
4. New snow fell onto a layer of surface hoar (fairly common after a long dry spell - 10 days)
5. Snowboarded alone (part of board was above surface- might have easily been rescued. What a way to go!)
6. Caused extensive cracks in snow pack
7. no doubt heard "whoompfing" sound
8. Caused two minor slab avalanches before the big one

9. Rescue gear? What good is a beacon if you are traveling solo? May simplify body recovery.
10. Did he check the avalanche reports?
11. Did he talk with locals about the conditions and the area he planned to board?
12. Did he look for slope instability at the trailhead? Searchers reported slides had occurred on similar aspects.
13. Did he do any tests? Rutschblock? Shovel shear? Pole tests? Stuffblock test?

## Accident Summary

This was a very preventable avalanche accident. Terrain, weather and snow pack clues clearly told that conditions were very dangerous, yet lacking avalanche-awareness training the man kept going. Nature was literally screaming in his ears that conditions were very dangerous, but ignorance lead to his death. Also traveling alone also lead to the man's death. Had a friend accompanied him, he would no doubt have been quickly found even though he did not carry rescue equipment. His death was senseless and should remind all backcountry travelers that small slides are just as deadly as large avalanches.

## Avalanche Terms

**Age Hardening** - The strengthening of snow after mechanical compaction (i.e. boot or ski packing).

**Artificial Avalanche** - An avalanche triggered by an animal, humans or their equipment.

**Aspect** - The direction the slope faces; described by using the 8 points of the compass.

**Avalanche Path** - A location in the terrain where avalanches move. May be divided into starting zone, track & run out zone.

**Bed Surface** - The main sliding surface of the slab, usually quite smoothed and compacted by the sliding blocks. May be a layer of snow or the ground.

**Cold Front** - The boundary between advancing cold air and warm air. Strong mixing and lifting occurs at the front usually resulting in precipitation.

**Compression Test** - A test for finding weak snow layers. The procedure involves loading a snow column by placing a snow shovel blade on top and tapping it with fingertips and fist a given number of times.

**Concave** - Curved like a segment of the interior of a circle or hollow sphere.

**Convex** - Having a surface that is curved or rounded outward.

**Creep** - The slow deformation of the snow pack on a slope due to settlement. The upper portions of the snow pack move in a down slope direction while the bottom remains attached to the ground.

**Crown** - The snow that remains on the slope above the crown surface.

**Crown Surface or Fracture Line** - The top fracture surface of the slab, usually a smooth clean cut, 90 degrees to the bed surface.

**Crust** - A hard snow layer usually formed by freeze/thaw cycles or moderate to strong wind.

**Crystal** - A solid whose molecules have a regularly repeated arrangement.

**Dendrite** - A star-like new snow crystal with numerous side branches; often three dimensional.

**Density** - The mass of a snow sample per unit of volume (expressed in kg/m<sup>3</sup>). The mass is determined by weighing a sample in grams and then dividing by the volume of the sample in cubic centimeters and multiplying by 1000.

**Deposition** - The transfer of water molecules from water vapor onto ice grains without passing through the liquid phase.

**Depth Hoar** - Large, coarse grains of snow formed by the temperature gradient metamorphism within the snow pack. Depth hoar grains have distinct faces and corners; sometimes appear as pyramids and cups. Depth hoar forms a very weak layer which is highly susceptible to shear or collapse.

**Facetting** - The formation of sharp corners and facets on snow grains, eventually producing depth hoar; temperature gradient metamorphism.

**Flanks** - The side boundaries of a slab avalanche where the snow pack failed in tension.

**Glide** - The slow, downhill movement of the entire snow cover over the ground surface.

**Grain** - The smallest particle that can be recognized with a hand lens. A grain may be composed of more than one crystal, distinguishable only on specially treated sections. The terms grain and crystal are applied interchangeably.

**Ground Avalanche** - A slab avalanche in which the ground is the bed surface.

**Hardness** - The resistance to penetration into the snow of an object of specified surface area.

**Homogenous** - Similar through out; refers to the snow pack.

**Humidity (Relative)** - The amount of water vapor in the air expressed as a percentage of the maximum that could be carried with the present air temperature. For example, if the temperature would drop and the amount of water vapor in the air remains the same, the relative humidity would rise.

**Inversion** - Cold air near the ground with warmer air above.

**Isothermal** - Same temperature through out.

**Layer** - A stratum of snow that is different in at least one respect (i.e. hardness, texture, density, grain shape) from the strata above and below.

**Lee Side** - The down wind side of a ridge, hill or other obstacle; often subject to wind loading.

**Loose Snow Avalanche** - The type of failure and start of an avalanche in cohesionless snow. A point release is the most visible characteristic.

**Melt-Freeze Metamorphism** - Changes of the snow into wet, rounded grains due to melting then re-freezing into hard layers and crusts.

**Metamorphism** - A Greek word for change of shape. Changes in the snow texture caused by pressure and temperature conditions.

**Orographic Lifting** - Forcing of air up and over terrain barriers. This form of lifting accounts for 50-70% of winter precipitation.

**Powder Avalanche** - An avalanche containing suspended, fine snow particles and with no dense core at the bottom.

**Probe** - A thin, one piece or collapsible metal rod (3 - 3.5 meters long) used for probing.

**Probing** - Pushing a rod vertically into the snow pack in an attempt to find persons or vehicles; estimating weakness and hardness of the snow pack; and measuring the snow pack depth.

**Run out Distance** - The distance which avalanches move in the run out zone.

**Run out Zone** - The area in an avalanche path where avalanches decelerate and stop.

**Rutschblock Test** - A field test that gives information about the weakest layer in a snow pack and the stability of the snow pack. The test involves loading by a skier in different steps on a snow block of area 2 m x 1.5 m on a slope.

**Settlement** - The decrease in thickness of a snow layer due to gravity and metamorphism.

**Shear Strength** - The ability of a snow layer to resist shear stresses applied to it. Shear strength is measured by stressing a layer to the point of failure using a standardized method.

**Shovel Burp Test** - A field test for finding weak layers in soft snow (typically new snow). The test is carried out by lifting a block of snow on a shovel, tapping the shovel, and observing the location and character of failure.

**Shovel Shear Test** - A field test for finding weak layers and their approximate shear strength. The test is carried out by applying a shear force with a shovel on a snow column.

**Sintering** - The process of bond formation between snow grains. The outcome is a stronger snow layer.

**Slab** - A cohesive layer of snow.

**Ski Pole Test** - A field test for finding weak layers in a snow pack by probing with the basket end of a ski pole.

**Slab Avalanche** - The type of snow failure and start of an avalanche in cohesive snow. A fracture line is the most visible characteristic.

**Snow Flake** - A conglomerate of snow crystals loosely bound together.

**Snow Profile** - A record of a vertical cross section of the snow pack. The profile depicts the layers and properties of the layers.

**Starting Zone** - The slopes at the top of an avalanche path where snow fails and avalanches begin to move.

**Stauchwall** - The lower boundary of a slab avalanche in the starting zone. It is often overridden by slab material and not recognizable.

**Stress** - A force (tension, shear, compression) per unit of area on which it acts. For example gm/cm<sup>2</sup> or kg/m<sup>2</sup>.

**Surface Hoar** - Deposition of water vapor from the air as ice crystals on to a cold surface.

**Temperature Gradient** - Change of temperature per unit change in depth (referring to a snowpack).

**Temperature Gradient (TG) Snow** - Snow which, because of a steep enough temperature gradient is metamorphosing into depth hoar.

**Transceivers** - Also called rescue beacons. Electronic devices capable of transmitting a specific radio frequency (standard 457 khz). They are carried in the transmit mode when traveling in avalanche terrain and switched to receive when a search is required.

**Trigger** - A force or an event, which initiates an avalanche.

**Warm Front** - The boundary between advancing warm air and colder air. At the front the warm air is lifted slowly, condensation and precipitation may occur.

**Windward** - The side of a mountain exposed to a wind.

## References

- [Avalanche.org](http://www.avalanche.org) – <http://www.avalanche.org>
- [Cyberspace Snow and Avalanche Center](http://www.csac.org) - <http://www.csac.org>
- Daffern, T. (1992). [Avalanche Safety for Skiers & Climbers](#). Seattle, WA: The Mountaineers.
- Fredston, J. & Fessler, D. (1994). [Snow Sense](#). Anchorage, AK: Alaska Mountain Safety Center.
- McClung, D. & Schaerer, P. (1993). [The Avalanche Handbook](#). Seattle, WA: The Mountaineers.

## Biographical Sketch

Dr. Steve Kugath has taught Outdoor Leadership courses in Utah, Colorado, Wyoming, Idaho, Indiana & North Carolina. Currently he is a professor at BYU-Idaho. He has backcountry skied for 13 years and taught climbing and mountaineering courses for 12 years. Dr. Kugath has completed a NOLS mountaineering course, WEA teaching certification, and Level I & II Avalanche Certification. Personal interests include backcountry skiing, climbing, photography, woodworking and family; he is married and the proud father of 6 children.

# Wilderness Survival and Outdoor Education

By

**Matt Ball**  
**Outdoor Pursuits**  
**Ohio University**

## Abstract

It has been said that wilderness survival is the doorway to the Earth. If this statement is true, then wilderness survival should be a very effective way to teach outdoor education. Whether you are teaching children or college students, wilderness survival skills can be used to bring people closer to the earth. For example, the “bow drill” fire will teach you about the trees; cordage from plant fibers will teach you about the world of plants; tea made from leaves, roots, bark, or needles will also teach about plants; and, sleeping in a debris hut will teach you about the animals. This paper will outline how to incorporate wilderness survival skills into outdoor education programs and how to implement teaching through questioning.

## Introduction

We often think of wilderness survival from a fear or emergency point of view; it is something only to be used when your life is on the line and you have no other hope to stay alive. In this paper, we will look at wilderness survival as an enjoyable way to become closer to the earth and as primitive living skills. We will focus on how to use these skills as a teaching tool for outdoor education.

Outdoor education is many times administered through games and activities such as nature hikes or observing an ecosystem within a one-foot circle on the ground. Often, the end result is that the participants look more closely at the earth only for that brief moment. The use of wilderness survival offers another way to get to the same end result. It offers a skill that will encourage the participants to become more interactive with nature by observing it and participating in it. This method permits the participant to walk away from the experience with something to show or teach to others.

Environmental outdoor education programs, as well as adventure outdoor education programs, will find that by using wilderness survival skills such as bow drill, a primitive fire-starting technique, participants will not only learn to use a knife properly and to make fire by friction, but also they will learn the trees around them in a much more personal way. The smell, touch, look, and location of a certain tree will become very much a part of this lesson. Many of the lessons taught in wilderness survival tend to reach far beyond that of the initial lesson. Wilderness survival provides opportunities for students or participants to develop a deeper relationship with the earth through guided observation and participation in the natural world around them.

Learning how to care for major needs such as shelter, water, fire, and food in the wilderness can give individuals a strong sense of security wherever they are.

As an outdoor educator, teaching people about the outdoors can become a lesson in itself. A common question asked of outdoor educators is “What tree is that?” or something similar. The outdoor educator reveals the answer, only to be asked the same question again and again. We, as outdoor educators, can use these questions to teach our students how to learn. Answering questions with questions can do this very effectively. The question that you ask the student should help them find the answer on their own. The process of teaching with questions is discussed later in this paper. Examples of how to integrate wilderness survival skills into outdoor education activities help to articulate the significance of this perspective in the field.

### **Wilderness Survival Skills Integrated Into Outdoor Education Activities**

Essentially outdoor educators are attempting to teach participants about science, history, empathy, respect, and a host of other lessons about the natural environment. Different activities will fit the needs of outdoor education programs, and it becomes the educator’s responsibility to identify what activity meets these needs. As discussed above with the bow drill fire, many lessons can come from one activity. The same is true with many of the survival skills. These activities or skills help the participants to develop relationships with the natural world all around them. These relationships allow the participant to see into a world they have not been accustomed to in their daily lives.

When first starting with a group that is not accustomed to the natural environment, it is very common to notice that the participants have difficulty seeing the difference between common plants or trees. Many people refer to this as the “wall of green” or not having “plant eyes.” With time participants can learn to see the differences between the plants, trees, birds, and animals, but first we must find ways to connect them to each through the activities that we provide. A good way to start developing this relationship with the plants is to make cordage, or rope, from plant fibers or the inner bark of a tree.

### **Trees and Plants**

At the end of their growing season, many plants send their energy back down to their roots or seeds for next season to grow again. During the winter months the stalk of the plant will remain. Many of these stalks such as Dogbane, Milkweed, and Stinging Nettle are easily found and great to use with groups. The outer fiber or bark of these plants can be stripped off and twisted into cord. The same can be done with many types of trees such as Poplars, Aspens, Walnut, Basswood, and many more. This fiber within trees is found under the bark and is best found on dead-down wood. Participants learning cordage discover that plants can offer great things to them. Many will make jewelry or other gifts with their cordage. The lesson in this activity reaches far beyond learning how natives made rope. It can be used to discuss respectful harvesting of plants and giving thanks for what we use.

Now that the cordage has been made we have developed a relationship with that plant and potentially a need to look for it again and again. There is now something that sets that particular plant apart from the rest. Other activities that work well in developing relationships with the trees and plants are one match fire, primitive fire, basket making, and other types of crafts like dream catchers, god’s eyes, and making tea from pine needles, mint, spice bush, or other similar sources.

## **Animals**

Our society moves at a very fast pace. We walk faster than we need to and should. We jump from activity to activity or flip from channel to channel with little time spent moving slowly or sitting still. When we walk in the forest at this fast pace, the birds and animals get scared and run. We then see loads of birds flying up and away from us with the occasional white flag of a deer tail bounding away from us. Many of our participants may believe that this is the only way that animals act: always running from place to place.

In reality, animals conserve their energy by walking or moving in what is called base line, a slow moving gate with intentional movements. A simple stalking game is an activity that demonstrates this lesson. To do a stalking game, one person sits on the ground with keys in front of them. The role of the rest of the group is to slowly and quietly move toward the sitter, take the keys, and then move back to starting place without being heard. The sitter must point to those that they hear to send them back to the start place. Before or after the game is started you can assign animals to small groups where they research their animals and learn what their major senses might be and learn to walk as they would walk. For example, bears are pace walkers, and so they move both left feet forward then both right feet. After learning how bears walk, participants can use this walking style to get the keys. Activities such as these allow participants to pretend and see what it is like through the eyes of the animal.

Other ways to develop a good understanding and empathy for the animals is to learn how they live, what type of shelters they use, and how they keep warm in the winter. A debris hut is essentially the same shelter the squirrel uses. Shelter building is very effective for teaching because the participant learns by doing the activity. Understanding how leaves and other natural elements operate to create a warm, waterproof shelter facilitates a recognition of how animals survive in the wilderness.

## **Teaching with Questions**

Tom Brown Jr., a noted tracker, author, and founder of the wilderness survival and tracking school that bears his name, often refers to a method of teaching known as “Coyote teaching.” The coyote in much of native lore is known as the trickster, a very sneaky and underhanded character. As an outdoor educator, you must become the coyote. Many times, participants want their questions answered the moment they ask, and many times, once their question has been answered, they will promptly forget it. They have not invested in their own learning beyond the act of asking.

Participants that are given knowledge do not own that knowledge. Those participants that work for the knowledge will own it. Thus, there exists the common saying “knowledge hard won.” The process of coyote teaching is demonstrated in the following example:

When asked “what tree is that,” you, an outdoor educator, respond with the answer. Twenty minutes later that same student turns, points, and asks again “what tree is that?” You turn and look at the student and think to yourself: “well, telling him or her didn’t work, so what should I say this time?” You look at the tree, then to the student, and say: “I do not know; let’s look at this for a minute.” You then begin to ask the student question after question about the tree: what does the bark look like, are the branches opposite or alternate, what type of soil is it growing in, on what side of the hill is the tree

facing. You continue with the questioning and discovery process and end by handing the student a field guide to trees. The student looks up the tree and finds that it is the same tree as the first one about which he or she had asked. The student turns to tell you what it is, thinking that you did not know, and that he or she is now teaching the teacher.

You, as the coyote teacher, have tricked the student into learning it for himself or herself. The student has learned how to answer his or her own questions (the process) and has the pride of owning that knowledge (the content).

As educators, we do not need to demonstrate our knowledge of nature by giving all the answers. As coyote teachers, we can help to bring students or participants into the experience much more deeply and help them to gain the pride from hard won knowledge. The coyote teacher role is not only to assist the participants in finding the answer but also to inspire and trick them into looking more closely at what is around them. The process of discovery is also taught. For example, the teacher says "is that poison ivy?" (knowing that the common vine is Virginia Creeper and has toothed palmate leaves), and all the student circle around looking at it. Some say yes, and some say no. To help them (or trick them) more, you point to the hairs on the vine and how it is attached to the tree, saying "it has to be poison ivy." Then, they all look at you not knowing what to believe and then back to the vine. "Can I see your field guide?" one of the group members asks. You hand it to the group. After a few minutes, the group decides that this is Virginia Creeper, not poison ivy, and that the teacher was wrong. After a few more tricks related to that plant, the group now knows two vines very well and are able to compare them. Both of these examples demonstrate the simplicity of the coyote teaching process. Coyote teaching provides an alternative teaching modality to assist participants in gaining outdoor knowledge. It is a simple and continual process that shifts the responsibility of learning from the educator to the student.

## **Conclusion**

Outdoor education is a very important part of helping people to understand more about the natural environment. Whether it is with an adventure trip program or an environmental education program, wilderness survival can offer many levels of educational lessons as well as skill development. Implementing wilderness survival into outdoor education programs creates multiple benefits for participants. They will not only have a better understanding and comfort level when lost or in potential trouble, but also they will receive the same lessons espoused in typical outdoor education program, if not at a deeper level of understanding when learning about the earth.

## **References**

Brown, T. (1983). Tom Brown's field guide to wilderness survival. New York: Berkley Publishing Group.

Young, J. (2001). The Kamana; naturalist training program. Duvall, WA: Wilderness Awareness School.

## **Biographical Sketch**

Matt Ball is the Coordinator of the Ohio University's Outdoor Pursuits program. He has earned a B.S. and M.S. in Recreation and Sports Sciences at Ohio University. Matt is a graduate of the Tom Brown Jr. Tracker and Wilderness Survival School, and is currently working on level 3 of the Kamana Independent Naturalist Training Program through the Wilderness Awareness School.

# **Civilian Jobs With Navy Outdoor Recreation**

**By**

**Ed Dunning  
Outdoor Recreation Specialist/Program Manager**

## **Abstract**

This paper describes several types of civilian jobs typically found in Navy Outdoor Recreation, job qualifications, and how to find the jobs.

Employing and retaining first-rate employees is essential to the success of Navy outdoor recreation activities. In 1998 Navy Morale, Welfare and Recreation contracted Mr. David Webb, Brigham Young University to conduct a baseline assessment of Navy Outdoor Recreation. He summarized his assessment with the following statement: "Employing people trained, educated, experienced and having a passion for outdoor education, recreation, adventures, and business will do the most to improve and grow outdoor adventure recreation in the Navy. Training, educating, motivating and sharing direction and vision with personnel is critical in developing the people. If you are developing the people, the people will develop the program. After selecting qualified people for employment, training is the next most important factor in program growth and financial viability."

The Human Resource information for this paper was taken and adapted from the Department of Navy Civilian Human Resources [www.donhr.navy.mil](http://www.donhr.navy.mil)

## **Types of Outdoor Recreation Jobs With The Navy Morale Welfare, And Recreation Department**

The Morale Welfare, And Recreation (MWR) Department administers a varied program of recreation, social, and community support activities on U.S. Navy facilities worldwide. Our mission is to provide quality support and recreation services that contribute to the retention, readiness, mental, physical and emotional well being of our Sailors. The majority of MWR staff are civilians. Our programs provide active-duty, reserves and retired Navy personnel and their families with outdoor recreation, sports and physical fitness activities, child development and youth programs, and a variety of food and beverage services. These programs, however, should not be viewed as something special or provided as a substantial bonus to Sailors and their families. These activities are similar to many basic programs found within the civilian community, such as municipal or private fitness centers, YMCAs, college and university student unions, childcare facilities, and the Boys and Girls Clubs of America. MWR programs are the backbone used to create a hometown environment for the Sailors'.

Every Navy base, MWR Department, and Outdoor Recreation Program is different. On bases where an Outdoor Adventure Center isn't established and on smaller bases, it is not uncommon for staff to be shared between MWR programs. Base demographics, the local environment, seasonal opportunities, natural resources, funding levels, base traditions, the base commanding officer, outdoor staff, and the MWR Department are all contributing factors determining what type of outdoor recreation program exists on each base.

The following outline briefly describes some of the jobs that may be found in Navy outdoor recreation. Depending on the position the qualifications and certifications may not apply to a particular job but generally they are highly desirable.

#### Director, Outdoor Recreation Specialist

##### Qualifications

- Bachelors or equivalent
- Three years of specialized on the job experience

##### Certifications

- All certifications are dependent on the equipment inventory, programs, services, and the geographical location. Training and certification match and meet the needs of customer services provided by the local operation.

#### Rental and Retail Shop Manager

##### Qualifications

- Bachelors or equivalent
- Two years of specialized on the job experience

##### Certifications

- Are nationally recognized organizations
- Are dependent on equipment inventory, programs, services, and location

#### Program Manager

##### Qualifications

- Bachelors or equivalent
- Two years of specialized on the job experience

##### Certifications

- Are nationally recognized organizations
- Are dependent on equipment inventory, programs, services, and location

#### Maintenance Staff

##### Qualifications

- Vocational or trade school
- High school diploma
- Two years of on the job experience

##### Certifications

- Are nationally recognized organizations
- Are dependent on inventory, programs, and services

#### Customer Service Staff

##### Qualifications

- High school diploma

##### Certifications

- Are nationally recognized organizations
- Are dependent on inventory, programs, and services

#### Lead Instructors and Guides—part-time

##### Qualifications

- High school diploma
- Two years on the job, specialized experience

##### Certifications

- Certified by nationally recognized organizations

#### Assistant Instructors and Guides—part-time

##### Qualifications

- High school diploma
- One year on the job, specialized experience

##### Certifications

- Certified by nationally recognized organizations

#### Contractors

- Contractor assumes all liability
- Signed Hold Harmless Agreements
- Certified by the appropriate national governing body
- Commercial liability insurance primary coverage of at least a \$1 million dollar comprehensive general liability and a \$100,000 property damage limit per occurrence
- Cover and pay for their employees workers' compensation benefits, in accordance with state statutes
- Responsible for the loss, damage or destruction of their owned or leased property or equipment
- A certification and reference check through the Better Business Bureau is required

### **Where To Find The Jobs**

#### Contact Installations

- Personal Contacts

Get to know the Outdoor Program Directors, personal contacts and word of mouth are invaluable.

- Navy Morale, Welfare and Recreation

You can find an Outdoor Recreation Directory here, [www.mwr.navy.mil](http://www.mwr.navy.mil) go to "Select Your Page" scroll to "Outdoor Recreation" or any other area of interest including stateside and overseas job openings.

- Airforce Crossroads

To find DOD Installations and make contacts this is one of the best sites, it has all military bases, [www.afcrossroads.com](http://www.afcrossroads.com) go to "DOD Installations".

#### Navy MWR Home Page

- [www.mwr.navy.mil](http://www.mwr.navy.mil) go to “Select Your Page” scroll to “Jobs”

#### Department Of The Navy Civilian Human Resources

- Navy and Marine Corps Jobs and employment information. [www.donhr.navy.mil](http://www.donhr.navy.mil)

#### USA Jobs

- All kinds of federal jobs and employment information can be found on this site [www.usajobs.opm.gov](http://www.usajobs.opm.gov).

#### US Office Of Personnel Management

- Information on federal government employment [www.opm.gov](http://www.opm.gov)

#### Civilian Personnel Management Service

- Pay and benefits information [www.cpms.osd.mil/wage](http://www.cpms.osd.mil/wage)

#### Navy Internships

- For overseas and stateside internships contact Rick Harwell, Worldwide Intern Program Manager (901) 874-2497, [rick.harwell@persnet.navy.mil](mailto:rick.harwell@persnet.navy.mil) and visit the web site at <http://mwr.navy.mil/mwrprgms/intern.html>.

#### The Benefits of Working for Department of the Navy

Set your sails in our direction for an exciting civilian career with the Department of the Navy. Whether you are looking for a challenging career or career advancement, you have come to the right place. We currently employ 190,000 civilians in a wide variety of occupations in support of our Department's mission.

In addition to a competitive salary, we offer paid vacation time and sick leave, a portable retirement plan with Government matching contributions, affordable health and life insurance plans, and health and wellness services. See the information below for a sample of what the Department of the Navy offers you and go to Department Of The Navy Civilian Human Resources [www.donhr.navy.mil](http://www.donhr.navy.mil).

#### Work - Life Balance

- Competitive salaries
- Two and one-half weeks of paid annual leave per year, five weeks of paid annual leave after 15 years of employment
- Thirteen workdays of sick leave per year
- Support of work and family
- Friendly working environment
- Ten paid Federal holidays each year
- Recruitment bonuses\*
- Relocation assistance \*
- Flexible work hours\*
- \* Varies by location and position

### Career Development

- On the job and formal education and training
- International opportunities for employment
- High level of job empowerment and responsibility
- Merit principles in selection for vacancies
- Structured career planning
- Opportunities for tuition assistance

### Retirement and Health Benefits

- Retirement plan
- 401K-type thrift savings plan
- Group health and life insurance
- Recreational activities and programs
- Employee assistance programs

### Competitive Salaries

We offer salaries that are competitive. Employees are normally paid every two weeks. In certain circumstances, employees may also receive overtime compensation, holiday pay, night differential, Sunday premium pay, bonuses and allowances. Federal employees receive annual cost of living pay adjustments and also receive other pay increases based on time in position and performance.

### Paid Annual Leave

Annual leave accrual rates are determined by an individual's total years of federal service. This includes both civilian and most military service. However, the majority of retired military members will not be eligible to receive annual leave accrual credit for their military service.

Years of Service	Hours/Two Week Pay Period	Days/Year
Less than 3	4	13
3 but less than 15	6	20
15 or more	8	26

Employees typically are allowed to carry a maximum of 30 workdays (240 hours) of annual leave from one leave year to the next.

### Sick Leave

Full-time employees accrue 4 hours of sick leave per pay period or 13 workdays per year. Unlimited hours of sick leave can be accumulated and carried over to succeeding years. Sick leave can be used for personal illness, care of sick family members, adoption, and medical appointments.

### Support of Work and Family

Comfortably balancing career and family requirements is an important issue to employees and managers within the Agency. The Department of the Navy's foundation of policies and programs is designed to help its employees cope with balancing the dynamic complexities of today's work and family life.

### Friendly Working Environment

The Department of the Navy is an equal employment opportunity employer and fosters an environment where employees are valued for their individual contribution to the accomplishment of the Department's mission. Employees have an opportunity to reach their fullest potential in a professional and challenging work environment.

### On-the-Job and Formal Education and Training

Education and training is encouraged. Navy employees have access to many excellent training programs and classes. All new employees attend a basic orientation and most receive on-the-job and formal classroom training through a wide variety of courses.

### Retirement Plan

New employees with no prior Federal service are covered by the Federal Employees' Retirement System (FERS) three-tier system. Under this system, employees contribute to Social Security and Medicare, a Retirement fund and a Thrift Savings Plan. Its features are "portable" so that employees who leave Federal employment may still qualify for the benefits. Minimum retirement age under FERS is dependent on date of birth, but ranges from age 55 to 57.

### 401K - Type Thrift Savings Plan (TSP)

The TSP is a retirement savings and investment plan for Federal employees, similar to the same type of savings and tax plan offered under most private corporation 401(k) plans and is one element of the FERS three part retirement system.

The TSP is a defined contribution plan. The retirement income you receive from your TSP account will depend on how much you have contributed to your account during your working life and the earnings on these contributions. FERS participants may contribute up to 11% of their salary under any of five investment funds offered. The Government automatically contributes 1% to your TSP account and will further match participant contributions up to 4% of basic salary, bringing the maximum government contribution to 5%. Employees covered by the Civil Service Retirement System (CSRS) can contribute up to 6% of their salary and TSP. There are no matching government contributions to TSP for CSRS employees.

Two of the main features of TSP are "tax savings" and "tax deferred earnings". This means the contributions you make come out of your pay before taxes, and the earnings made on your TSP account are not taxed until you receive the money.

Further features include a choice of investment options, interfund transfers, loans from your own contributions and earnings, in-service withdrawals and portable benefits if you leave Federal service.

### Group Health and Life Insurance

Under the Federal Employees Health Benefits (FEHB) program, employees can choose from a number of health insurance plans that vary in costs and benefits. The Federal Employees Group Life Insurance (FEGLI) Program offers term life insurance at reasonable rates via payroll deductions. The Navy pays a percentage of the employee's premiums under both the Federal Health Benefits and Life Insurance programs.

### Recreation Activities and Programs

Generally, civilian employees may also use Department of the Navy recreational facilities that are open to active duty military personnel on a space available basis. This includes libraries, restaurants, movie theaters, gyms and other facilities. Discount entertainment tickets (theaters, movies, sporting events, and theme parks), vacation packages and cruises, and personal travel (air, train, ship) are also available to employees.

**The Following Charts Are Examples Of Pay Scales In The Northwest.**

Pay varies in the US and overseas depending on the area of employment.

NAF Pay Ranges for the Snohomish, WA Wage Area

Issue Date: 27 Aug 2001

Pay Ranges

NAF Level	Minimum		Maximum	
	Yearly	Hourly	Yearly	Hourly
1	14,020	6.72	24,440	11.71
2	16,840	8.07	32,160	15.41
3	22,850	10.95	48,500	23.24
4	29,500	14.14	76,500	36.66
5	54,000	25.87	121,218	58.08
6	90,000	43.12		

2001 General Schedule Locality Rates of Pay, Portland-Salem, OR-WA\*

Effective January 2001

Grade	Annual Rates for Steps (in dollars)									
	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
GS-1	15,714	16,238	16,761	17,281	17,805	18,112	18,626	19,147	19,168	19,658
GS-2	17,668	18,087	18,673	19,168	19,384	19,955	20,525	21,095	21,666	22,236
GS-3	19,277	19,919	20,561	21,204	21,846	22,488	23,130	23,772	24,414	25,056
GS-4	21,640	22,362	23,083	23,805	24,526	25,248	25,969	26,691	27,412	28,134
GS-5	24,212	25,019	25,827	26,635	27,442	28,250	29,057	29,865	30,672	31,480
GS-6	26,988	27,887	28,786	29,685	30,584	31,483	32,382	33,281	34,180	35,080
GS-7	29,990	30,990	31,989	32,989	33,988	34,988	35,987	36,987	37,986	38,986
GS-8	33,214	34,322	35,429	36,537	37,644	38,752	39,860	40,967	42,075	43,183
GS-9	36,686	37,908	39,131	40,353	41,575	42,798	44,020	45,242	46,465	47,687
GS-10	40,400	41,747	43,094	44,441	45,788	47,135	48,482	49,829	51,176	52,523
GS-11	44,388	45,868	47,347	48,827	50,306	51,785	53,265	54,744	56,223	57,703
GS-12	53,200	54,972	56,745	58,518	60,291	62,064	63,837	65,610	67,382	69,155
GS-13	63,263	65,372	67,482	69,591	71,700	73,810	75,919	78,028	80,138	82,247
GS-14	74,758	77,250	79,743	82,235	84,727	87,219	89,711	92,203	94,695	97,188
GS-15	87,936	90,867	93,798	96,730	99,661	102,592	105,523	108,454	111,386	114,317
*	Incorporating The 2.70% General Schedule Increase And A Locality Payment Of 10.32% For The Locality Pay Area Of Portland-Salem, OR-WA (Net Increase: 3.89%)									

## **Applying For Department Of The Navy Civilian Positions, A 3-Step Process**

Department Of The Navy Civilian Human Resources [www.donhr.navy.mil](http://www.donhr.navy.mil).

The Department of the Navy has eight Human Resources Service Centers located worldwide. Each Center recruits individuals to fill Navy and Marine Corps civilian positions occurring in its serviced area. E-mail and mailing addresses for the Centers are found in the [Human Resources Service Center Contact List](#).

Applying for civilian positions at any one of these Centers is easy...just follow the steps below:

### **Step 1 - Conduct A Job Search**

Our job opportunity announcements are listed under "[Jobs, Jobs, Jobs](#)" at [www.resume.hroc.navy.mil/JobOpportunities/jobs\\_employment\\_opportunities.htm](http://www.resume.hroc.navy.mil/JobOpportunities/jobs_employment_opportunities.htm). You can search for job opportunities by position title, by all open positions, or by geographic regions covered by each of our Human Resources Service Centers. Check back often as job opportunity announcements are updated daily.

If you are unable to access our Job Announcements under Jobs, Jobs, Jobs it may be due to a temporary router problem or a problem with your Internet Service Provider (i.e., AOL, MSN and Yahoo). Please try again in a few minutes. If you are still unable to access the site, contact your Internet Service Provider to ensure that they have the correct [web site address](#).

### **Step 2 - Carefully Read The Job Opportunity Announcement Information**

Not all announcements require the same information. Some may contain job-unique requirements and/or special application instructions. For example, positions such as Nurses or Child Care Workers may require that you possess and provide information on licenses or credentialing information, so make certain you read the announcement carefully. When reading the announcements, also pay close attention to the "Area of Consideration" and/or "Who May Apply" sections. Before applying for a position, ensure that you meet the criteria specified in both.

The "Area of Consideration" block reflects the area throughout which the candidate search is being conducted, for example, "Current Department of the Navy Employees". For such an area of consideration, if you are not a Department of the Navy civilian employee, you will most likely not be considered for the vacancy if you apply.

The "Who May Apply" section further defines applicant eligibility. For further information on "Who May Apply" see the [Common Hiring Categories Definitions](#) section.

### **Step 3 - Format And Submit Your Application**

You can apply for most job opportunity announcements with a Resume. However, some announcements may require special application forms. Check the "How to Apply" section in the announcement to determine the correct application format.

- Where a resume is the appropriate application form, the Department of the Navy has developed a [Resume Builder](#) to help you create and submit your resume. The [Resume Builder](#) is accessible from the bottom of each of our job announcements listed on [Jobs, Jobs, Jobs](#). Once you select the vacancy in which you're interested, scroll to the bottom of the vacancy announcement and click on the "Take Me to the Resume Builder" button. Block-by-block, the Resume Builder will prompt you to enter all the necessary information needed to create an electronic resume. It will even send your resume directly to the appropriate Human Resources Service Center where you wish to apply.

- Once you have a resume on file with a Human Resources Service Center, you may be able to use it to apply for other job opportunity announcements issued by that Center by using Application Express. Read the "How to Apply" section of the job opportunity announcement(s) you are interested in applying on to determine whether Application Express may be used.

Prior to starting your resume, you may want to get some helpful hints by reading our How to Prepare a Resume information and by reviewing a Sample Resume.

Although electronic submission of your resume using the Department of the Navy Resume Builder is the preferred method, you may also E-mail your resume or submit a Hardcopy Resume. Please see the special instructions for submitting your resume in either format. Links to all the above may be found at [www.donhr.navy.mil/Jobs/JobKit.asp](http://www.donhr.navy.mil/Jobs/JobKit.asp).

### Common Hiring Categories Definitions

Please refer to the following information in determining whether you meet the "Who May Apply" and/or "Area of Consideration" sections of our listed job opportunity announcements. You will be asked to submit supporting documentation noted for each category prior to any final job offer being made. In some cases, documentation will be required at the time of application. Please refer to announcements for specific information.

If You Meet The Below Definition(s) ...	Your Hiring Program Category Is ...
Applicants who are current, permanent career or career-conditional civilian (status) employees of any Federal agency. This does NOT include Federal employees who are currently working on temporary or term appointments. <u>Supporting documentation</u> : Copy of your most recent Notification of Personnel Action, SF-50, showing current title, pay plan, series and grade.	Current Permanent Federal Civilian Employee
Applicants who are current, permanent career or career-conditional civilian (status) employees of any Department of Defense agency. This does NOT include employees who are currently working on temporary or term appointments. <b>NOTE</b> : If you meet this definition, you are also eligible as a current permanent Federal civilian employee. <u>Supporting documentation</u> : Copy of your most recent Notification of Personnel Action, SF-50.	Current Permanent DOD Civilian Employee
Applicants who are current, permanent career or career-conditional civilian (status) employees of any Department of the Navy (including United States Marine Corps) activity. This does NOT include employees who are currently working on temporary or term appointments. <b>NOTE</b> : If you meet this definition, you are also eligible as a current permanent Federal civilian employee and a current permanent DOD civilian employee. <u>Supporting documentation</u> : Copy of your most recent Notification of Personnel Action, SF-50.	Current Permanent DON/USMC Civilian Employee

<p>Applicants who worked overseas as an appropriated fund Federal employee, while a family member of a civilian, non-appropriated fund or uniformed service member serving overseas, for an accumulated total of 52 weeks and who received a fully successful (pass) or better performance appraisal. This appointment eligibility is effective for a period of three years following the date of return from overseas to the United States to reassume residence.</p> <p><u>Supporting documentation:</u> A copy of a Notification of Personnel Action, SF-50, showing completion of 52 weeks of creditable overseas service, <u>AND</u> a copy of your most recent annual performance appraisal, <u>AND</u> a copy of your Permanent Change of Station Orders used to return you to the United States.</p>	<p>Executive Order 12721 Eligible</p>
<p>Former Federal employees who previously attained career status, <u>OR</u> former Federal employees with veterans' preference who previously attained career-conditional status as a civilian employee in any Federal agency, <u>OR</u> former Federal career-conditional employees (without veterans' preference) who separated from Government service within the past three years. <u>Supporting documentation:</u> Copy of your most recent Notification of Personnel Action, SF-50.</p>	<p>Reinstatement Eligible</p>
<p>Current Non-Appropriated Fund (NAF), Civilian Intelligence Personnel Management System (CIPMS), Defense Civilian Intelligence Personnel System (DCIPS) employees or other Interchange Agreement eligibles who have served continuously for at least one year under a permanent appointment, or former Interchange Agreement eligible employees (i.e., NAF, CIPMS, DCIPS) who served under an appointment described above, and who were involuntarily separated within the past year without personal cause (i.e., not because of unacceptable conduct or performance). For further information and a list of other Federal agencies that are under Interchange Agreements, please check <a href="http://www.opm.gov/employ/html/sroa2.htm#Interchange%20Agreements%20With%20Other%20Merit%20Systems">http://www.opm.gov/employ/html/sroa2.htm#Interchange Agreements With Other Merit Systems</a> . <u>Supporting documentation:</u> Copy(ies) of applicable personnel actions verifying the above criteria.</p>	<p>Interchange Agreement (NAF, CIPMS, DCIPS, etc.) Eligible</p>
<p>Current or former employees displaced from non-Department of Defense Federal agencies. Additional information on this program and supporting documentation needed may be found at <a href="http://www.usajobs.opm.gov/ei32.htm">www.usajobs.opm.gov/ei32.htm</a>.</p>	<p>Interagency Career Transition Assistance Plan (ICTAP) Eligible</p>
<p>Applicants who are spouses of relocating active duty military members or DOD civilian employees, may apply to specific announcements regardless of the Area of Consideration, during the 30 days preceding through the 6 months following their sponsor's relocation to the activity's commuting area. Spouses must be appointable under one of the hiring program categories identified on this form. <u>Supporting documentation:</u> A copy of sponsor's Permanent Change of Station order and/or copy of your most recent Notification of Personnel Action, SF-50, if applicable.</p>	<p>Spouse of Relocating Military Member or DOD Civilian</p>
<p>Veterans' Readjustment Appointment (VRA): To be eligible, a veteran must have served in the Armed Forces on active duty (not active duty for training or inactive duty as a Reservist) for more than 180 days and received other than dishonorable discharge. Veterans must have served time which occurred after August 4, 1964, (or February 28, 1961, for those who actually served in the Republic of Vietnam). The 180-day requirement does not apply to</p>	<p>Veterans' Readjustment Appointment and/or 30% or More Disabled Veteran</p>

<p>veterans who were discharged or released from active duty because of a service-connected disability. It also does not apply to members of the Reserves or National Guard ordered to active duty under 10 United States Code (U.S.C.) 12301(a), (d), or (g), 12302, or 12304 for service during a period of war as defined in 38 U.S.C. 101(11) or in a campaign or expedition for which a campaign badge is authorized. "Period of War" includes World War II, the Korean conflict, Vietnam era, the Persian Gulf War, or the period beginning on the date of any future declaration of war by Congress and ending on the date prescribed by Presidential proclamation or concurrent resolution of the Congress. To be eligible for a VRA appointment, a veteran who meets the above definition must be appointed within 10 years of his or her last discharge from active duty. <u>Supporting documentation:</u> DD-214(s) showing type of discharge. Additionally, veterans claiming 10-point veterans' preference will need an Application for 10-Point Veteran Preference, SF-15, and applicable supporting documents, as noted on the form. <u>NOTE:</u> Veterans' preference information and forms may be located on web sites such as <a href="http://www.opm.gov">www.opm.gov</a> or <a href="http://www.dol.gov/dol/vets">www.dol.gov/dol/vets</a> .</p> <p>30% or More Disabled Veteran: Individuals who have retired from active military service with a disability rating of 30 % or more; or, who have been rated by the Department of Veterans Affairs (DVA) within the preceding 12 months as having a compensable service-connected disability of 30 % or more. <u>Supporting documentation:</u> DD-214(s) showing type of discharge. Additionally, veterans will need an Application for 10-Point Veteran Preference, SF-15, and applicable supporting documents, as noted on the form. <u>NOTE:</u> Veterans' preference information and forms may be located on web sites such as <a href="http://www.opm.gov">www.opm.gov</a> or <a href="http://www.dol.gov/dol/vets">www.dol.gov/dol/vets</a> .</p>	
<p>Preference eligibles or veterans who separated from the Armed Forces under honorable conditions after substantially completing an initial 3-year term of active service. <u>Supporting documentation:</u> DD-214(s) showing length of active duty service and type of discharge.</p>	<p>Veterans' Employment Opportunity Act Eligible</p>
<p>Individuals with a major physical or mental impairment(s) that limit(s) one or more life activities as certified by a State Vocational Rehabilitation Service or the Department of Veterans Affairs (DVA). <u>Supporting documentation:</u> Recent letter from DVA or State Vocational Rehabilitation Service.</p>	<p>Persons with Disability</p>
<p>A college graduate who has: (1) an accumulated grade point average of 3.45 or above on a 4.0 scale; or, (2) graduated in the upper 10% of their graduating class or major university subdivision for baccalaureate degree. <u>Supporting documentation:</u> College/university transcript.</p>	<p>Outstanding Scholar</p>
<p>Full or part-time students enrolled in high school, vocational institution, college, or university. <u>Supporting documentation:</u> Proof of enrollment.</p>	<p>Current Student</p>
<p>Spouse of an overseas active duty U.S. Armed Forces service member who meets ALL of the following conditions: 1) The spouse and the sponsor were married prior to the relocation (before the Permanent Change of Station). 2) Since the relocation, the spouse has not accepted or declined a permanent position or a temporary position of one year or longer at the new duty station of the sponsor. 3) The spouse is among the best qualified. 4) The position applied for is not above the highest permanent grade previously held in the Federal service. <u>Supporting documentation:</u> A copy of the sponsor's</p>	<p>Overseas Military Spouse Appointment Eligible</p>

Permanent Change of Station orders. <b>NOTE:</b> Preference can be granted only <b>once</b> per PCS relocation. Once you accept or decline a continuing position (one that is expected to last one year or more), either appropriated fund (AF) or non-appropriated fund (NAF), at the new duty station, your eligibility for preference terminates whether or not preference was applied.	
A spouse, or unmarried dependent child (including stepchild, adopted child, and foster child) not more than 23 years of age who is residing with a member of the U.S. Armed Forces, or a U.S. citizen employee of a U.S. Government Agency (including nonappropriated fund activities) whose duty station is in a foreign area and has not accepted or declined a permanent position or a temporary position of one year or longer at the new duty station of the sponsor. <b>Supporting documentation:</b> A copy of the sponsor's Permanent Change of Station orders. <b>NOTE:</b> This preference does not apply to family members of locally hired civilian employees.	Overseas Family Member Preference Eligible
Overseas Limited Term Appointment may be used to recruit United States citizens in an overseas area. However, there are certain host nations-specific requirements and limitations to this authority. Contact the local Human Resources Office for specific details.	Overseas Limited Appointment Eligible

## How To Prepare A Resume

Don't write your resume for a particular position. Instead, concentrate on defining and identifying all meaningful skills you possess for those career fields in which you are interested. Then describe your experience in terms of specific skills rather than general descriptions.

- Carefully read the information and application instructions provided in the job opportunity announcements listed under Jobs, Jobs, Jobs.
- Review the Sample Resume.
- Use our Resume Builder to create your resume. It will automatically format your resume into the Federal resume format and will electronically send it to the applicable Human Resources Service Center. Our Resume Builder is accessible from the bottom of each job opportunity announcement listed on Jobs, Jobs, Jobs.
- If you wish to build and save a Resume Builder resume for future use and not apply to an actual job opportunity announcement, just select and open any of our vacancy announcements. Scroll down to the bottom of the announcement and click on the Resume Builder Button. Create your resume. Then use the Save button, rather than the Preview button.
- Describe your experience with specific words and phrases rather than vague descriptions. For example, rather than using "communicates orally and in writing", it is better to use "writes complex technical documents and reports; prepares policy statements; and develops and presents Power Point briefings to large groups".
- If you use jargons and acronyms specific to your profession, spell them so that all readers can readily understand what you do.
- Describe your interpersonal traits and attitudes. Descriptions could include such traits as time management, dependable, leadership, sense of responsibility, ability to prioritize, etc.
- You can have more than one paragraph for each experience, but keep paragraphs short by entering a carriage return (blank line) after at least every 20 lines. It's easier to read.

- Don't use fancy treatments such as graphics, italics, underline, shadows, and reverses (white letters on black background) or signs and symbols such as % # \* ( ) / = and don't type your information in all capital letters.
- Electronic submission of resumes through the use of the Department of the Navy Resume Builder is the preferred method for applying on the Department of the Navy's job announcements. The Resume Builder is accessible at the bottom of each job opportunity announcement listed on Jobs, Jobs, Jobs. Resumes may also be submitted by E-mail or hardcopy. If you are planning on E-mailing or mailing a hardcopy resume, review the Directions for E-mail Resumes or Directions for Hardcopy Resumes.
- Once you have a resume on file with a Human Resources Service Center, you may be able to use it to apply for other job opportunity announcements issued by that Center using Application Express. Read the "How to Apply" section of the job opportunity announcement(s) you are interested in applying on to determine whether Application Express may be used.

### **Directions For Hardcopy Resumes**

Hardcopy resumes are accepted, however submission of resumes through the Department of the Navy Resume Builder is preferred. Instructions for hardcopy resumes are listed below.

1. Follow the Do's and Don'ts below when preparing and submitting your hardcopy resume:

**Do:**

- Closely follow the Sample Resume format.
- Please limit your resume to a maximum of five pages in length.
- Type your resume on 8.5" x 11" white bond paper, printed on one-side only.
- Provide a laser printer original if possible. A typewritten original or a high quality photocopy is also acceptable.
- Leave a minimum 1" margin on all sides.
- Use standard typefaces such as Arial, Times New Roman, or Courier.
- Use a 12-pitch font.

**Don't:**

- Submit a handwritten or faxed resume.
- Fold or staple your resume.
- Condense spacing between letters.
- Use fancy treatments such as italics, underlines, shadows, and reverses (white letters on black background).
- Submit a resume with light or faded print.

2. Include your responses to the Additional Data Sheet. Double-check the servicing Human Resources Service Center. You may access and print the Additional Data Sheet by selecting the appropriate Human Resources Service Center found on the next page.

## Human Resources Service Center (HRSC) Contact List

### CAPITAL:

HRSC-CAP  
Nebraska Avenue Complex, Bldg 3  
291 Cryptologic Court NW  
Washington, DC 20393-5444  
wantajob@cap.hroc.navy.mil

### EAST:

HRSC-EAST  
Norfolk Naval Shipyard, Bldg 17  
Portsmouth, VA 23709-5000  
wantajob@east.hroc.navy.mil

### EUROPE:

HRSC-EUROPE  
PSC 821, Box 121  
FPO AE 09421-5000  
wantajob@esc.hroc.navy.mil

### NORTHEAST:

HRSC-NE  
RESUMIX UNIT  
111 S. Independence Mall, East (Bourse Bldg)  
Philadelphia, PA 19106-2598  
wantajob@ne.hroc.navy.mil

### NORTHWEST:

HRSC-NW  
3230 NW Randall Way  
Silverdale, WA 98383  
wantajob@nw.hroc.navy.mil

### PACIFIC:

HRSC-PAC  
178 Main St., Bldg 499  
Honolulu, HI 96818-4048  
wantajob@pac.hroc.navy.mil

### SOUTHEAST:

HRSC-SE  
9110 Leonard Kimble Rd  
Stennis Space Center, MS 39522-0002  
wantajob@se.hroc.navy.mil

### SOUTHWEST:

HRSC-SW  
525 B Street, Suite 600  
Attn: Code 53 – Resume Intake Unit  
San Diego, CA 92101-4418  
wantajob@sw.hroc.navy.mil

Good Luck And Thank You For Your Interest In Civilian Employment With Navy Outdoor Recreation

### **Author's Biography**

Ed Dunning worked eight seasons on trail maintenance and as a crew construction foreman with the USFS in Washington. In 1988 Ed began work at Naval Air Station Whidbey Island, WA as the outdoor rental shop manager and increased operations to include programs, gear repair service, and a resale shop. He has guided and instructed canoeing, rock climbing, backpacking, skiing, and snowshoeing. Currently Ed works for Naval Personnel Command as an Outdoor Recreation Specialist/Program Manager.

# **Women Rock! A History of Women in Climbing and Mountaineering**

**By**

**Kaija M. Webster  
University of Minnesota Duluth – Outdoor Program  
Duluth, Minnesota**

## **Abstract**

Since the 1700's history has recorded women's climbing achievements atop crags and snowy peaks around the world. Despite challenges such as climbing in full skirts and overcoming society's attitude that women were not fit to climb, many women have made their mark in the climbing world. This paper gives examples of pioneering women climbers beginning in the eighteenth century and continuing to the present day.

## **Introduction**

The examples listed in this account are by no means a complete history of women in climbing. They are a selection of dates, stories and quotes that show us a glimpse of some achievements of women in climbing and mountaineering. Climbers of all abilities and genders can find inspiration in the lives and accomplishments of these women.

## **Early Women Climbers**

- 1808 Marie Paradis is the first woman to summit Mt. Blanc. The "ordinary girl from Chamonix" is guided by Jacques Balmat who was one of two men to first summit the 15,840 foot Mount Blanc (Ardito, 1990).
- 1838 Henriette D'Angeville is second woman to summit Mt. Blanc. She wears custom mountaineering clothing consisting of a full skirt of wool and matching wool trousers underneath in order to maintain a ladylike appearance (Lukan, 1968).

- 1864 Lucy Walker appears in etching of the Zermatt Alpine Club membership. Each member is carefully identified in a photo key except for Ms. Walker. The lone image of a woman is left unidentified (Tyndale, 1986).  
Lucy Walker was the first woman to summit the Matterhorn and was in the 4<sup>th</sup> party to climb the Eiger. Lucy was described as “homely and inclined to be plump, she never wore breeches, and existed on the mountain on a ladylike diet of sponge cake and champagne, but she notched up an impressive array of routes which included several first ascents (Bonnington, 1992).
- 1874 Meta Brevoort photographed in her full-skirted climbing outfit with her nephew W.A.B. Coolidge and guide Christian Almer. She climbed 30 peaks in 11 years throughout the late 1800’s (Bonnington, 1992).
- 1880’s By the late 1800’s some women mountaineers finally dare to be seen wearing trousers in public (Lukan, 1968).

### Early Equipment and Techniques

- 1860’s Rope – manilla rope was used, constructed from natural fibers and very weak by today’s standards, especially when wet. Rope breakage was a common occurrence. A rappeller would tie the rope into a loop at one end, drape it over a flake, use a dulfersitz (body wrap) rappel and then flick at the rope from the bottom of the rappel until it came undone. Most belaying was done by feeding the rope over the belayer’s shoulder or around the waist. Anchors were seldom used (Tyndale, 1986).  
Sleeping bag – Whymper’s ‘blanket bag’. “After making a roaring fire, I nestled into my blanket bag, an ordinary wool blanket sewn up, double round the legs, with a piece of ribbon round the open end...”(Tyndale, 1986).  
Tents – Whymper’s tent was constructed of cotton, unbleached calico cloth which was sewn to avoid a seam at tent’s ridgeline. Four ash poles formed the 6’ tall frame and were held together with wrought iron bolts. The door was held together with cotton ties and the whole works was staked out with the climber’s rope. This tent weighed 23 pounds and could be set up by two people in three minutes. Cost for this high-tech tent in 1860 = 4 guineas. (Tyndale, 1986).

### Twentieth Century Women

- 1906 Fanny Bullock Workman sets the high elevation record for a woman by climbing Pinnacle Peak in Kashmir.
- 1910 Women are still seen on the ski slopes wearing long, wool skirts (Lukan, 1968).
- 1908 Annie Peck summits the previously unclimbed Huascarán in Peru (21,837 feet). She was 57 years old at the time (Peck, 1911). In order to defend her elevation record for an American woman, Fanny Bullock Workman sends surveyors to Peru to contest Peck’s estimation of Huascarán at over 22,000’ and succeeds in defending her record.
- 1911 Annie Peck makes the first ascent of Mt. Corpuna in Peru. (<http://womenclimbing.com>, 2001).

- 1920 Mirium O'Brien coins the phrase 'manless climbing' as she climbs in all-women parties with out the customary male leader (<http://womenclimbing.com>, 2001).
- 1931 An editorial in the Ladies' Alpine Club Year Book is quoted, "Can we hope that the day is not far off when our achievements will be judged on their own merits, rather than over-praised because we are women?" (Greenwood, 1987).
- 1936 Betty Woolsey joins Bill House, Fritz Weissner and Alanson Wilcox to try for the first ascent Mt. Waddington. On summit day, the House and Weissner pair get a good weather window and tag the summit while Woolsey and Wilcox are kept back due to storms. Like many women on climbing expeditions, Woolsey is rarely mentioned as being a part of the expedition party (Woolsey, 1984).
- 1940 Barbara Washburn and her husband, Bradford, summit Mount Bertha in Alaska. Still feeling 'altitude sickness' after the descent, Barbara visits the doctor to learn she had summited the mountain while in her first trimester of pregnancy. In 1941 Barbara and Bradford made the first ascent of Mt. Hayes, just three months after giving birth to her first child. (Osius, 1987).
- 1947 Barbara Washburn summits Denali.- the fourth ascent by any party (Osius, 1987).
- 1955 Three women from the Ladies' Scottish Climbing Club, Monica Jackson, Elizabeth Stark and Evelyn Camrass, form the first woman's Himalayan expedition and summit a 22000' peak in the Jugal Himal (Jackson, Stark, 1956).

### **Closing the Gap**

- 1973 Bev Johnson and Sibylle Hechtel are the first women's team to climb a route on El Capitan in Yosemite, CA (<http://womenclimbing.com>, 2001).
- 1975 A team from Japan and Tibet become the first all-woman expedition to reach the top of Mt. Everest (Blum, 1980.)
- 1978 The American Women's Himalayan Expedition is the first all-women team to send team members to the summit of Annapurna I. The expedition leader, Arlene Blum writes about learning of a commercial trip to Denali in 1970 on which women could pay special rates to go and help cook at base camp but would not be allowed on the climbs since they were "not strong enough to carry their share of the loads and lack the emotional stability to withstand the psychological stresses of a high-altitude climb." (Blum, 1980).
- 1989 Lynn Hill comes in 3<sup>rd</sup> over all (for both men and women) at the International Grand Prix championship in Lyon, France (Bonnington, 1992).

## Present Day Firsts

- 1991 Catherine Destivelle completes an unsupported solo first ascent of a route on the difficult West Face of the Dru (Bonnington, 1992).
- 1993 Lynn Hill is the first person, man or woman, to climb the Nose of Yosemite's El Capitan using only free climbing (no aid) techniques. In 1994, Lynn Hill free climbs the Nose in less than 24 hours, a feat that remained unrepeated by anyone at the publishing of the 1999 Climbing Magazine article. (Takeda, 1999).
- 2000 Liv Sansoz on-sights numerous 5:13's and flashes the 5:14b/c *Hasta La Vista* (Pegg, 2000).

## What's Next?

Clearly, the gap between men and women's potential in the world of climbing is steadily closing. Today, instead of being astonishing, it is commonplace to find women on cutting edge climbing projects around the world. Attitudes are changing with the times and the sky is the limit for all the climbers of the future.

What does this mean for those of us who teach and climb with girls today? The good news is that research has shown the benefits for girls of a healthy active lifestyle. Studies show that physically active girls deal better with stress, get higher grades in school, are less likely to drop out of school, have a lower incidence of depression, are less likely to abuse chemicals and to abuse their own bodies and have more positive social interactions. <http://education.umn.edu/tuckercenter/pcpfs>. August, 2001. Girls' participation in activities like rock climbing may not land them on the pages of history books but it may improve their quality of life.

The opportunities in climbing that we take for granted today were not always easily accessible for girls and women. So next time you belay a girl on her first climb, give a nod of thanks to the Annie Pecks and Barbara Washburns who paved the way for the future.

## References

- Andrews, R. (1984). No spare rib: The advent of hard women rock climbers. *Mountain*. 97, 22-29.
- Ardito, S. (1990). *Mont Blanc: Discovery and Conquest of the Giant of the Alps*. Seattle, WA: The Mountaineers.
- Blum, A. (1980). *Annapurna: A woman's place*. San Francisco: Sierra Club Books.
- Bonnington, C. (1992). *The climbers: A history of mountaineering*. London: Hodder & Stoughton.
- Greenwood, S. (1987) Historical perspective. . *Climbing Magazine*. 103, 44-46.

Jackson, M., & Stark, E. (2000). Tents in the clouds: The first women's himalayan expedition. Seattle, WA: Seal Press.

Lukan, K. (Ed.). (1968). The Alps and alpinism. New York: Coward-McCann, Inc.

Osius, A. (1987). Washburn & Washburn. . Climbing Magazine. 103, 58-61.

Peck, A. (1911). A search for the apex of America. New York: Dodd, Mead & Co.

Pegg, D. (2000). Hot Flashes. Climbing Magazine. 199, 30.

Steiger, J. (1987). Lynn Hill. Climbing Magazine. 103, 48-57.

Takeda, P. (1999). The Milestone. Climbing Magazine. 190. 78-86.

Tyndale, H.E.G. (1986). Scrambles amongst the Alps: Edward Whymper. Salt Lake City, UT: Peregrine Smith Books.

Woolsey, E. (1984). Off the beaten track. Salt Lake City, UT: Paragon Press.

From the world wide web: <http://womenclimbing.com>. August 2001.

<http://education.umn.edu/tuckercenter/pcpfs>. August, 2001.

### **Biographical Sketch**

Kaija Webster has been teaching in the outdoors for over a dozen years. She currently spends her days near the cliffs and waters of Lake Superior working for the University of Minnesota Duluth as the director of their Vertical Pursuits climbing school. Her master's degree is in outdoor/environmental education.

# **An Essay: The Culture of Safety**

**By**

**Ron Watters  
Idaho State University**

## **Abstract**

Any outdoor educator knows about rules. Outdoor educators spend a considerable amount of time dealing with them: risk management plans, accepted safety practices, and first aid protocols. But do rules really make programs safer? This essay looks at rules from an entirely different perspective, and suggests that true safety may lie in breaking the rules.

Sometimes Buddhists aren't the most practical people in the world. Take my friend, Harvey. He's a Buddhist. As long as I've known him, and long before it became a stylish thing to do, his head has been shaved. He teaches Yoga, has a peaceful countenance about him, and speaks slowly in measured tones. He is very spiritual, but very impractical, particularly when it comes to the outdoors. I doubt whether Harvey could find his way out of the woods on a well worn trail. His problem as I see it is rooted in his odd view of rules.

Rules. Any outdoor educator knows about rules. We, in the outdoor field, spend a considerable amount of time at conferences talking about them: risk management plans, accepted safety practices, and first aid protocols. You name it. We've got a rule. We know how to conduct ourselves: what we should or should not do, what our programs should or should not do, and what our participants ought and ought not do.

When you think about it, there's a considerable amount of hubris attached to all these rules. An unwritten dictum in the profession says that the number of rules one knows is directly proportional to status. It's like toys: the person who accumulates the most toys wins. The one who learns the most rules, rules.

So what does Harvey say? Just this: Harvey says that you should learn the rules so you know how to break them properly.

Pshaw! Now isn't that the silliest thing you've ever heard? You can just hear the laughter and back slapping that would result if a Harvey were to show up and make such a remark at a national risk manager's conference. Break the rules? Why even have rules in the first place if you're going to break them?

Let's humor Harvey a bit more and take a look from his side of things. After all, looking at problems in more than one way is a rule in accident prevention.

When I told Harvey that the outdoor education field would find his view on rules absurd, he responded by asking me a question: Do rules really make our programs safer? Of course, I immediately answered. In fact, I explained, they've grown in importance. The more years I spend in outdoor education, the more rules I see. Risk management plans are swelling and operating procedure manuals run into dozens of pages. Entire books are published on accepted safety practices. The Association of Experiential Education has been known to charge nearly \$100 for such books. Why, in fact, are some authorities in outdoor education pushing certification programs for outdoor leaders? Because certified people know the rules better! Any idiot knows that.

But Harvey responded in his very quiet manner and told me that no list of rules makes a program any safer. One must learn the rules, he said, but a person must go beyond the rules and build a storehouse of knowledge and experience in the sphere of activity that the rules cover. And then that person must gain even more experience and go so far beyond rules that they disappear and it's only their meaning that you are left with and breaking or keeping them no longer matters.

Can you imagine yourself repeating the above paragraph in an outdoor liability court case as an expert defense witness? The judge's eyes would roll and the plaintiff's attorney would be restraining himself from jumping up and shouting "thank you!"

But Harvey has touched on something that strikes a cord because the process of understanding is a step above rote memory. And when I asked him about how this is supposed to keep a program safer, he told me that an individual's true well being is not the product of rules but being the part of a culture of safety.

A culture of safety, he explained, is one in which everyone plays a part: managers, trip leaders and participants. It is not based on rules, but rather on the concept of participatory safety. It's a simple concept but powerful: members of the group watch out for one another. It's the entire group which helps keep the trip safe, not just one person.

That's very much different than the typical situation where there's one leader and he or she makes all the decisions, and is largely in charge of safety. Rather, Harvey says, an open environment should prevail on trips and activities. If someone sees something they are uncomfortable with, they should be free to express themselves, even members of the group with little or no experience. Everyone's opinions are valuable. Everyone helps make the trip safe.

When I thought about what Harvey said, it brought to mind a climb that I was on a number of years ago in the Tetons. While descending, I ran into a very well known mountain guide. He had been throughout the world, climbing some of the hardest routes imaginable and was immensely more experienced than I. As it turned out, he and I happened to end up as the last two people on a rappel. He was rappelling before me, but before he stepped over the edge, he asked me to double check the anchor, his harness, and rappel device. Then, in return, he took a look at my harness and rappel device.

That was it, and he was over the edge. It was quick, took no time, but it set the tone. It made me re-think and re-check my own rappel, and when I finished, it stayed with me, keeping me focussed on safety the rest of the way down the mountain. I was dumbfounded that this giant in the mountaineering world would even care about the opinion of someone with a fraction of his experience and knowledge.

He did care. Even well seasoned climbers can make mistakes and those of much lesser ability can point out possible problems. Nine times out of ten, there's no problem, but the one time there is a problem, it can save a life.

That's the sort of atmosphere that Harvey is suggesting and one that you want to cultivate in an outdoor program, one in which everyone helps watch out for one another. No matter what the ability level, no matter what the activity, all can help.

Participatory safety can become more contagious than the flu. When individuals with more experience ask for the opinions of others, they invite other members of the group to become owners of the trip or activity. Most often, it starts with your program's leaders, trip initiators and experienced participants, and it quickly leads to others, and then they spread it to more. I felt it on my climb in the Tetons, and that feeling that I was left with has been with me ever since.

After thinking about these things for a while, it dawned on me what Harvey meant by the culture of safety. It is something that becomes ingrained in you and your program. It truly makes programs safer like no set of rules on piece of paper can do.

But I'm not going to toss out the rule book yet. In fact, I'm heading back to my office right now to do a little more work on the risk management plan. I've got just one more rule to add: listen to Harvey more often.

### **Biographical Sketch**

Ron Watters has worked for the Idaho State University Outdoor Program for 31 years. Two years ago he stepped down as director and now divides his time between writing and teaching outdoor education for the Physical Education Department. He is the author of seven books, including *Never Turn Back*.

# **Leave No Trace – A Unified Minimum Impact Recreation Message**

**By**

**Stephen and Susann Paige  
Leave No Trace, Inc.**

## **Abstract**

Leave No Trace is a national program dedicated to teaching responsible outdoor skills and ethics. Begun as a US Forest Service (USFS) program in the 1970's and further developed by the National Outdoor Leadership School (NOLS), the Leave No Trace (LNT) program now involves a broad array of partners. Retail shops and land managers, gear manufacturers and Scout troops, conservation organizations and user groups all join together to promote a consistent minimum-impact recreation message. A signed agreement assures that LNT is promoted by federal land managers in the USFS, Bureau of Land Management, National Park Service, and the US Fish and Wildlife Service.

Since 1994, the LNT program has been managed by Leave No Trace, Inc., a non-profit organization based in Boulder, CO whose mission is to promote and inspire responsible outdoor recreation through education research and partnerships.

The LNT program is structured under the following seven principles:

- Plan Ahead and Prepare
- Travel and Camp on Durable Surfaces
- Dispose of Wasted Properly
- Leave What You Find
- Minimize Campfire Impacts
- Respect Wildlife
- Be Considerate of Other Visitors

Using the seven principles as a basis, the LNT program is applied widely. Curriculum is available for a variety of North American environments—from rainforest to desert, mountains to rivers, cave to coast. LNT also focuses on specific users including rock climbers, sea kayakers, river runners, spelunkers, mountain bikers, and equestrians.

Hands-on training opportunities exist through the LNT Master Educator, Trainer and Traveling Trainer programs. The science of recreation ecology is used to assess and support LNT practices. A current Laboratory project in Durango, Co focuses on community-wide LNT education and assessment of the message's effectiveness. The LNT "Frontcountry" Program assists urban wildland managers with issues such as dog waste, dog management, user conflict, and off-trail hiking.

In the face of increasing recreational use and resource damage, a Leave No Trace educational program can help outdoor educators and others address critical impact issues pertaining to all types of human powered recreation.

### **The Traveling Trainer Program**

Leave No Trace, Inc. and Subaru of America have joined forces to promote responsible outdoor recreation across the United States. In order to put Leave No Trace education in motion the Subaru-Leave No Trace Traveling Trainers program was established. Together they provide essential education for all types of outdoor enthusiasts. Two teams of educators travel throughout the United States in Subaru vehicles teaching diverse groups of outdoor enthusiasts how to be good stewards of the land.

Training and education has always been the backbone of the Leave No Trace program. The Traveling Trainer teams visit outdoor retail stores, National Park visitor centers, school groups and events like National Trails Day, National Public Lands Day and volunteer trail projects. Ideally, training occurs in the outdoor classroom where students are able to experientially learn about Leave No Trace.

### **The Leave No Trace Trainer Course**

The goal of the LNT Trainer Course is to promote, inspire and teach the LNT Outdoor Ethics curriculum to outdoor educators, agency personnel, businesses, and organizations that are likewise committed to promoting outdoor ethics. In an effort to introduce the national LNT program to a broad spectrum of public and private sector personnel working in the field of outdoor recreation the course is provide at nominal cost. Another goal is to develop a cadre of LNT Trainers with the knowledge and motivation to teach LNT to a wide variety of outdoor enthusiasts with the objective of reducing social and resource impacts and promoting stewardship on America's public lands.

The course covers the 7 Principles of LNT, including teaching skills and techniques. It is generally an overnight course held in an outdoors setting and requires one brief teaching idea/presentation by each participant. Interested groups can request a Trainer Course, or a visit by the Trainers for other training options, on the web at [www.LNT.org](http://www.LNT.org) , and click on the 'Request a Visit' button. Or contact Jen Tucker, Traveling Trainer Program Manager, at [Jen@LNT.org](mailto:Jen@LNT.org) .

### **References**

Hampton, Bruce and David Cole. *Soft Paths: How to Enjoy the Wilderness Without Harming It*. Harrisburg, PA: Stackpole Books, 1995.

World Wide Web: [www.LNT.org](http://www.LNT.org)

### **Biographical information**

Stephen and Susann Paige have toured the country extensively to satisfy their need for diverse recreational opportunities. For the last two years they have done so with Leave No Trace as Traveling Trainers, as Team East in 2000, and as Team West in 2001. When not on the road they call Maine home.

# **Anatomy of Organizing and Hosting a Conference in Mexico**

**By**

**Jim Fullerton**

**University of Nebraska-Lincoln and Idaho State University**

## **Abstract**

One of the greatest sources of pride and stress during my outdoor recreation career was organizing and hosting the 1997 ICORE conference in Mexico. Over the years I had led or co-led many outdoor adventure trips into Mexico for the University of Nebraska (beginning in 1979 as a student leader; usually taking groups on backpacking trips into the Barrancas del Cobre in Chihuahua, and sometimes venturing into the land of Mayan pyramids in the Yucatan peninsula). The germ of an idea for organizing and hosting a conference in Mexico actually began in 1992. The events over the next five years that led up to the '97 ICORE in Mexico, spanning my positions at two different universities, are retraced through this article.

## **In the Beginning**

At the 1992 International Conference on Outdoor Recreation and Education (ICORE) that was held at the University of Calgary, Canada, I was approached by David Webb from Brigham Young University. David was trying to drum up options for future conference sites. He suggested that I consider hosting a future conference. I told him that I wasn't sure if the University of Nebraska-Lincoln would attract many participants as a conference site, especially since the conference had typically been held in such outdoor resource-rich areas like Montana, California, Colorado, North Carolina, Idaho, and Canada. Mexico seemed like a better choice!

During the coming year I discussed the idea of hosting the conference in Mexico with University of Nebraska-Lincoln Campus Recreation staff, and Donna Rudolph, a former librarian at Cal-Berkeley and Harvard. Donna had co-authored a book on South America, worked as a travel agent in Lincoln, Nebraska, and loved to encourage groups to travel in Latin America, through her own travel company called VISTAS. She had served as a travel consultant for many University of Nebraska trips to Mexico and South America over the years. The challenge of organizing a conference in Mexico excited us all.

At the 1993 ICORE at Oregon State University I announced our desire to host the conference in Mexico. The conference attendees were interested, but we were asked to do some research and come back with more details at the following year's conference. During 1994 I visited the states of Chihuahua (with Stan Campbell, Director of UNL Campus Recreation) and Yucatan in search of a good location for a future ICORE conference. At the 1994 ICORE conference at Fort Carson, Colorado, we offered the choices of these two sites and had very strong support, but failed to gain the necessary 2/3 approval by one vote!

Undaunted (well, slightly daunted), we tried again at the 1995 ICORE at Cornell University in New York. Perhaps out of sympathy for our persistent efforts, or respect for the fact that I had just served the previous year as President of AORE, or simply because it was an idea whose time had come, the University of Yucatan in Mexico was selected to be the site for ICORE '97!

### **Supporting Arguments for Taking the Conference to Mexico**

Some of the supporting arguments that may have helped to turn the tide along the way were:

--If the International Conference on Outdoor Recreational and Education was to be truly international, it needed to extend its horizons and seek international conference sites. After Canada served as the host country in 1992, Mexico seemed like a logical "next step."

--A common mission for institutions of higher education is promoting diversity in society. International travel has great potential for increasing cultural awareness, sensitivity to differences, and supporting diversity.

--By the year 2010, it is projected that Hispanics will be the largest minority group in the United States (surpassing African-Americans and all other ethnic groups). Los Angeles already has the third highest Mexican population in North America (after Mexico City and Guadalajara).

--Crossing the border into Mexico is easy. U.S. citizens only need a certified birth certificate and picture I.D. (or a passport) to get a tourist card and cross the border. No prior arrangements need to be made.

--Opportunities for outdoor adventure abound in the Yucatan, with activities such as hiking, bicycling, caving, kayaking, and snorkeling easily available.

--Opportunities for spectacular encounters with nature are prevalent in the Yucatan, ranging from wildlife sanctuaries, national parks, jungles, beaches, and rain forests.

--Opportunities for awe-inspiring cultural experiences are everywhere in the Yucatan, including ancient Mayan ruins, colonial cities almost 500 years old, plus the challenges and rewards of the Mexican culture and Spanish language.

--We had established coalitions with many local groups, including the Universidad Autonoma de Yucatan (University of Yucatan), Fundacion Cultura Yucatan (a local cultural foundation), the Asociacion Mexicana de Turismo de Aventura y Ecoturismo (Association of Mexican Adventure Travel and Ecotourism), Pronatura (a pro-nature Mexican environmental group), and others.  
Local support was very enthusiastic and forthcoming.

--Descriptions and photographs were provided of the many hotels and restaurants surrounding the University of Yucatan in the peripheral downtown district in the capital city of Merida.

--Information about inexpensive flights into Cancun from numerous U.S. gate cities was shared, plus information on the extensive bus service throughout the peninsula.

## **Finalizing Plans and Details**

Just a few weeks before the 1996 ICORE conference at the University of Utah, I visited the Yucatan peninsula again to make contacts, finalize plans, and gather detailed information about the host university, hotels, and sites for pre- and post-conference tours. A slide presentation and information sheets were delivered to ICORE participants in Salt Lake City to show the beautiful attractions of the site for the 1997 ICORE.

So, with the final countdown now begun, we set to the task of formalizing our advance registration materials, which were to be mailed to all former conference attendees and current members of the association. The dates were set for November 4-11, 1997. (The core conference itself would be Wednesday through Friday, November 5-7, with one day for pre-conference tours, and four days for conference post-tours.)

The sheer volume of information required to organize a national conference is fairly intimidating, but the difficulties of preparing such information about a site in another country thousands of miles away made it almost overwhelming. Thank goodness some of the key parties involved had just hooked up to e-mail (including me in Nebraska!). Information flowed freely back and forth with a minimum of disruptions, and a great deal of the conference planning was handled this way.

Since the Yucatan's primary commerce comes from tourism these days, English is widely spoken, so most communication was handled in that language. However, Donna Rudolph's fluency in Spanish and familiarity with the area were a tremendous asset, and we really couldn't have reached our ultimate goal of hosting the conference without her commitment and dedication.

Arranging for the educational sessions was of the utmost importance for the success of the conference. The first step was to prepare a "Call for Presenters" to solicit presentations by conference attendees. This was mailed out in March 1997, with a June 1997 response deadline.

## **Keynote and Featured Speakers**

Identifying and negotiating compensation for keynote and featured speakers was one of the most vital, and most satisfying, tasks. This duty gave the opportunity to communicate with people whom I had admired and respected for years. We almost got a commitment from Carl Franz, author of The People's Guide to Mexico and Backpacking, Boating, and Camping in Mexico, to be our keynote speaker, which would have been a huge coup by my reckoning, but he was revising an edition of one of his books and pressures from his publisher forced him to decline at the eleventh hour.

Instead, we obtained the services of "Mexico" Mike Nelson (who was formerly the primary author of Sanborn's travel guides to Mexico, and a specialist on little known attractions in Mexico) to be our keynote speaker. He gave a slide show to open the conference and gave a lively talk called "On the Road Somewhere in Mexico."

Next we arranged for Dr. Simon Priest, well-known author in the outdoor field, to be a featured speaker. He plugged his most recent book (a textbook on Outdoor Recreation Leadership) and spoke on "Outdoor Leadership 2000."

When the rector (chancellor equivalent) of a university in an adjacent state (Universidad de Quintana Roo) heard that we were bringing this conference to the Yucatan, he volunteered to present a session called "Training Adventure Leaders in Mexico." He presented overheads and

described how his university was using outdoor recreation instructors from Europe to come and train students for the emerging adventure tourism market in Mexico. He invited conference attendees to consider coming to teach for a semester or two, and I know of one faculty member from Colorado who has since done it.

Finally, we enlisted the authors of a beautiful book of color photography and narratives called Mexico's Copper Canyon, Richard Fisher and Kitty Williams Fisher, to close the conference with a spectacular slide show. As it turned out, Richard got the opportunity to go to Russia after we contracted with them, so Kitty came alone. In many ways it worked out for the best that Kitty gave the presentation by herself. In Mexico the role of women is still evolving, and to see a strong American woman give the presentation on Mexico was most likely a very positive image for the Mexican participants.

In addition to these featured speakers, there ended up being 25 educational sessions presented by conference attendees. Most were conducted by American outdoor program leaders or academic faculty, but there were also sessions by NOLS (National Outdoor Leadership School), Outward Bound, and several by Mexican adventure outfitters. (The total conference attendance was 110, which was mostly Americans, one Canadian, one Australian, and 12 Mexican participants.)

A significant source of revenue for the conference was from selling space to vendors (of which there were 13), including four from Mexico (Ecoturismo Yucatan, MEXICANA Airlines, Merida Hotels, and Yucatan Turismo). These vendors displayed their products and services in the open air courtyard of the university during the conference.

Contributing something back to the conference site was established as a priority early on. The University of Yucatan received a considerable allocation of funds from the conference (\$2,000), and the Yucatan Cultural Foundation was the beneficiary of a charitable auction held one night that netted \$741. In addition, many conference participants brought donations of outdoor gear and clothing that were given to the Mexican Conservation Corps.

As was stated in the beginning of this article, organizing and hosting this conference in Mexico in 1997 was one of the greatest sources of pride and stress in my career. One of the greatest additional stressors during this time was learning of a job opening at Idaho State University in July 1997, applying for the position, flying to Idaho to interview in August, being offered the position, and leaving my job at the University of Nebraska in late September and starting my new job at ISU three days later. To further complicate things, I flew back to Nebraska in late October to retrieve my family and move out of our old house and into a moving truck. We were then clobbered as we drove across Nebraska and Wyoming by the freak October 1997 ice and snow storm that broke countless trees and power lines. When our whole family finally made it to Idaho, I had to leave for the ICORE '97 conference a week later. What an epic adventure!

I am most grateful to the Campus Recreation staff at the University of Nebraska-Lincoln for their support throughout the planning and fruition of the conference. Becky Dolliver, who served as a volunteer intern for the event, deserves special recognition. In retrospect, despite the stresses, there is no doubt that it was an experience that I will always value greatly and wouldn't give up for anything. I hope that those who attended the '97 ICORE in Mexico feel the same way. After all, as the old Mexican trail saying says: *!Hay que ir a llegar! (You have to go to get there!)*

## **Author's Biography**

Jim Fullerton used to fancy himself as quite an adventurer and world traveler (after backpacking, climbing, or visiting in 30 countries on four continents), but he traded it all in for the differently rewarding adventures of family life. Jim is currently the Interim Director of the Bennion Student Union on the University Place campus in Idaho Falls, Idaho. He encourages everyone (especially his daughters Kate and Emily) to fully explore our world and to take reasonable risks in life.

# Writing Collegiate Outdoor Program Field Manuals

By  
Tom Stuessy  
Indiana University Outdoor Adventures

## Abstract

Outdoor programs in colleges and universities are expected to do a lot of things. They write risk management plans, hire and train staff, handle paperwork, buy and maintain gear, as well as enforce policy in regards to staff and participants. While both administrative duties as well as field instructions are both integral, well organized manuals can eliminate confusion among staff, improve communication, and increase safety in your program. This session focused on the proper way to organize the endless lists of what is expected of programs in a collegiate setting.

As you begin to write your manual you should first ask yourself a few questions. Everyone has a mission, right? What is yours? When was the last time you made a decision based on your mission statement? In essence, your manual is an extension of your mission statement. It is the “flexible”, dynamic and living mission. It is the source your staff will turn to for assistance in decision making. Failure to see this connection makes for loose and arbitrary decision making, which only can equate to lack of policy enforcement and confusion among staff.

“Who can I turn to for help?” There are resources out there that can help you. The first tier of help are national commissions. For example the US Product Safety Commission. This agency looks at everything from playground slides to chainsaws. Secondly, and possibly more appropriate, are Professional Society Guidelines and the your local operating and manufacturing plans. These are a bit closer to home. These include AEE, mountaineering clubs, local rangers, an academic department, committees, and of course, your colleagues.

I strongly suggest forming checks and balances with other programs and a committee established with outside sources. Being on college campuses we have a lot of resources to take advantage of, use them. Fill your committee with diverse people from as many different agencies as you can. Deb Ajango had tremendous success with this method at the University of Anchorage Alaska.

Social exchange is the most underused and effective way to improve your program. Most folks are a little hesitant to send out there work for critique as they do not want to be judged by colleagues as lacking insight, skill or professionalism. Do not fall into this trap!! There is a choice to be made: you can either set your pride aside and improve yourself or not partake in the development of the industry that employs you. We have a responsibility to each other. Send your stuff out there and have it critiqued.

After all this feedback, who writes the manual? YOU. Sit down with the mission statement and draw up a skeleton of the manual. You may also consider bringing in your university’s Risk Management Department. This will serve you down the road when you propose new

programming. If you still need help, always refer to the mission statement and keep asking colleagues for advice, they will give it to you.

At this point you can involve staff. When staff sees the manual, you will already have had the chance to instill traditions, philosophy, and policy that serve your ideal situation. Make sure staff are on the development committee. You may want to consider blocking off sections of the manual for different staff to help with. Involving staff at the early stages will insure two things. 1) they will know the policy and understand why it is in place. 2) They will be more likely to self-police when faced with policy they helped create while you're not there.

To generate the skeleton, it is suggested that you break down your manual into two parts: Critical and Programmatic. Critical items are as you would suspect. For example: "All participants will wear helmets while climbing." The following is a not an all-inclusive list of items that should be in the critical items category.

- ✓ Table of contents
- ✓ Mission
- ✓ Planning meetings (how to plan and conduct)
- ✓ Trip preparation expectations
- ✓ Leader expectations
- ✓ Skill requirements and skill testing methods
- ✓ Gear lists
- ✓ Lost individual information
- ✓ Medical response policies (includes medication)
- ✓ Trip itineraries
- ✓ Transportation policies
- ✓ Drug and alcohol policies
- ✓ Specific activity safety policies

Critical items boil down to safety and well being for your staff and participants. As liability increases, it is crucial that your staff be well advised in regards to the manual. Word choice is very important here. Words like always, must, will, or definitely should be avoided unless you are very confident that it is a certainty. Prosecuting attorneys have taken advantage of poor word choice more than once.

Programmatic items include the following:

- ✓ Staff pay scales
- ✓ Hiring policies
- ✓ Leader benefits
- ✓ Teaching/learning strategies
- ✓ Gear check in and check out
- ✓ Discipline actions
- ✓ Cash advance info
- ✓ Loading vans/suburban policies
- ✓ Food packing
- ✓ Gear storage

Are critical items more important than programmatic items? In court maybe. However, it is the comprehensive approach of both phases that will keep you out of court in the first place. If all come back safely after the trip, but each staff member thinks they are supposed to get a free item out of retail for every trip they lead, is your program really ready for the next trip?

How often do should we be revising out manuals? After a little investigation, it was found that Voyageur Outward Bound most recently revised their field manual in 1996. National Outdoor Leadership School reported not revising "that often". NOLS uses notebooks for each activity and have the flexibility of making subtle changes relatively easily. The Wilderness Education Association's backcountry classroom was written in 1992 and is currently being revised now. For your program, I suggest formal reviews each year with a mid-year informal review. Set up a system where you can evaluate what is effective and what is not.

Revising manuals is not an easy task. Mistake number one is sitting back proud of a recently revised manual. I suggest keeping a manual set aside to make notes in as the year goes along. It is impossible to sit down with no notes or accounts of strengths and weaknesses of the manual and revise it effectively. Also, you may consider a review an internal review board that can make changes to the manual on an on-going basis. You have the option as to how you will bind your manual. I suggest a three ring binder. You can pull one page at a time for revisions.

In conclusion, keep your manual as up to date on new techniques in teaching and trends as you are. This will improve you program as well as educate your staff. Utilize your staff. They have skills and expertise that will help and they will be invested in the process. Be sure to utilize your peers and take advantage of social exchange. Further, use precedence with caution. Things improve because they change. Be dynamic and set time aside to revise and stick to it. Just as you reserve planning meeting rooms at the beginning of each semester you should spend a couple days reviewing and improving your manual. Good luck.

## References

Drury, J. & Bonny, B. (1992). The Backcountry Classroom. ICS Books, Merrville, IN

Harvey, M. (1999). The National Outdoor Leadership School's Wilderness Guide. Fireside, New York, NY

Voyageur Outward Bound School. (1996). Voyageur Outward Bound School Instructor Handbook. In house print.

## Biographical Sketch

Tom Stuessy is currently an Assistant Coordinator at Indiana University Outdoor Adventures in Bloomington, Indiana and is an ACA whitewater kayaking instructor. He is pursuing a Ph.D. in Leisure Behavior in the School of Health Physical Education and Recreation with a research interest in risk perception. In addition, Tom is currently serving as the Associate Executive Director of the Wilderness Education Association.



**U.S. Department of Education**  
 Office of Educational Research and Improvement (OERI)  
 National Library of Education (NLE)  
 Educational Resources Information Center (ERIC)



## Reproduction Release

(Specific Document)

**I. DOCUMENT IDENTIFICATION:**

Title: <i>ICORE (International Conference on Outdoor Recreation + Education) Proceedings 2001</i>	
Author(s):	
Corporate Source: <i>AORE (The Association of Outdoor Recreation + Education)</i>	Publication Date: <i>2003</i>

**II. REPRODUCTION RELEASE:**

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY  _____ _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY  _____ _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY  _____ _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
<b>Level 1</b>	<b>Level 2A</b>	<b>Level 2B</b>
↑ <input checked="" type="checkbox"/>	↑ <input type="checkbox"/>	↑ <input type="checkbox"/>
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

electronic) and paper copy.

Documents will be processed as indicated provided reproduction quality permits.  
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: <i>Georgi Baird</i>	Printed Name/Position/Title: <i>Georgi Baird, Manager</i>	
Organization/Address: <i>Assoc. of Outdoor Recreation + Education 2705 Robin Street Bloomington IL 61704</i>	Telephone: <i>309-829-9189</i>	Fax: -- SAME -- <i>309-829-9189</i>
	E-mail Address: <i>gebaird@aore.org</i>	Date: <i>5-30-03</i>

**III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):**

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

**IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:**

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

**V. WHERE TO SEND THIS FORM:**

Send this form to the following ERIC Clearinghouse:

**Acquisitions**  
**ERIC/CRESS at AEL**  
**P. O. Box 1348**  
**Charleston, WV 25325-1348**  
**Toll Free: 800-624-9120**  
**FAX: 304-347-0467**  
**e-mail: [ericrc@ael.org](mailto:ericrc@ael.org)**  
**WWW: <http://www.ael.org/eric/>**

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

**ERIC Processing and Reference Facility**  
**1100 West Street, 2nd Floor**  
**Laurel, MD 20707-3598**  
**Toll Free: 800-799-3742**  
**Fax: 301-953-0263**  
**E-mail: [ericfac@inet.ed.gov](mailto:ericfac@inet.ed.gov)**  
**WWW: <http://ericfac.piccard.csc.com>**

EFF-088 (Rev. 9/97)