

## DOCUMENT RESUME

ED 476 475

RC 024 069

AUTHOR Harrison, Geoff  
TITLE The Growth of River Kayaking and Its Indirect Effect on Institutional Whitewater Programs.  
PUB DATE 2001-11-00  
NOTE 6p.; In: Daring To Be Different! Proceedings of the Annual International Conference on Outdoor Recreation and Education (ICORE) (15th, Pocatello, ID, November 6-11, 2001); see RC 024 067.  
AVAILABLE FROM For full text of entire proceedings: <http://www.aore.org/ICOREProceedings2001.pdf>.  
PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)  
EDRS PRICE EDRS Price MF01/PC01 Plus Postage.  
DESCRIPTORS \*College Programs; \*Design; Equipment; Higher Education; \*Outdoor Activities; Outdoor Education; \*School Business Relationship; School Recreational Programs  
IDENTIFIERS \*Kayaking; \*Kayaks

## ABSTRACT

Historically, whitewater kayaking has been a key component of some institutional outdoor programs, offering low-cost instruction that emphasizes safety, skill, and the spirit of down-river travel. Each year, several thousand students are introduced to the sport of kayaking through instructional seminars offered by university outdoor programs. Classic teaching boats were long and skinny and had round bottoms. They rolled easily and offered excellent stability on their sides. Many programs found these boats increased participants' confidence and helped them stay with the sport after instruction. During the 1990s, whitewater kayaking saw exponential growth due to strong economic times and mass-market appeal. Boat designs followed the growing sport of rodeo "play-boating," and had features intended to make freestyle kayak moves possible. Long boats with round displacement hulls were replaced by their short, flat-bottom descendants. In addition, retail prices of boats increased because of additional design costs. This rapid growth left many program directors wondering where their instructional programs fit into the matrix of industry standards. Eventually, all institutional kayaking programs will need to upgrade their current equipment inventory. Program staff must reexamine its teaching philosophy and restructure the instructional curriculum to capitalize on the advantages and accommodate the limitations of the new equipment. (TD)

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

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.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

Georgi Baird

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

1

## 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 Represenative). 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.



**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  <i>SAMPLE</i>  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  <i>SAMPLE</i>  TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY  <i>SAMPLE</i>  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)