This mini-unit focuses on the lives and accomplishments of John Lloyd Stephens and Frederick Catherwood and their contacts with the Maya. This project deals specifically with how Stephens' published accounts and Catherwood's drawings became the basis from which all further Mayan research developed. These two explorers were the first to describe and chronicle fully their discoveries in Mexico and Central America. Topics discussed include: (1) "The Yucatan, Location, Climate and Basic Geography"; (2) "Earliest References to the Yucatan Peninsula"; (3) "Early Maya History"; (4) "Mayan Language"; (5) "John Lloyd Stephens"; (6) "Frederick Catherwood"; and (7) "Modern Research Regarding the Maya." Contains 12 references. (EH)
John Lloyd Stephens and Frederick Catherwood
Mayan Explorers

This project represents my efforts to incorporate a mini-unit on the lives and accomplishments of John Lloyd Stephens and Frederick Catherwood into a complete unit on the Maya. This unit (including the mini unit that will be described in detail in this project), will be an integral part of a new global studies class taught and offered by the Foreign Language Department in my school system. This class will replace our current senior Spanish course entitled Spanish 5 Honors. The new course will be an in-depth study of the geography, history and culture of the Spanish speaking world. Units will be developed on the Iberian Peninsula, Mexico, Central America and South America. My intent in this project is to show the portion of the Mexico unit that will deal specifically with the works of Stephens and Catherwood and how Stephens' published accounts and Catherwood's drawings became the basis from which all further Mayan research developed.

As a study of the Maya is a wide and difficult topic to cover in great detail, I would suggest that the unit on the Maya begin with this mini-unit that will set the background for a clearer understanding of these remarkable people. I chose Stephens and Catherwood as our guides as they were the first to fully describe and chronicle their discoveries in Mexico and Central America. Their astonishment regarding their discoveries make them excellent guides for students entering the mysterious world of the Maya for the first time.

I see the role of the teacher in the management of this mini-unit as that of a guide and resource person. Utilization of cooperative learning techniques would be the route that I would follow. Students taking on leadership roles in groups would be the most effective way to divide and master pieces of information to be shared with the whole class as the mini-unit progresses.

This mini-unit will require approximately 10 class days to complete. This will include work in class, guest speakers, field trips and the viewing of a video on the subject.
In order to allow the students sufficient time to research areas of interest, the teacher should prepare a general information class on the topic of the Maya and most especially Stephens and Catherwood. Offering a short biography of each man and then discussing with the students the areas to be covered in the mini-unit. So as not to overwhelm the class, the following are the topics that should be discussed and also include the assignments to be divided:

a) The Yucatan, Location, Climate and Basic Geography.

b) Earliest References to the Yucatan Peninsula.

c) Early Maya History.

d) Mayan Language

e) John Lloyd Stephens

f) Frederick Catherwood

g) Modern Research Regarding the Maya

A suggested schedule would be:

Day 1 Introduction
Day 2 Location/climate/population of the Yuc.
Day 3 History of area: Spanish Conquistadores
Day 4 Intro to Catherwood/Stephens
Day 5 Continue discussion of C&S
Day 6 Read excerpts of writings/show slides and compare modern pictures with drawings done by Catherwood.
Day 7 Map out C&S journeys
Day 8 Discuss archeology in New World
Day 9 Student presentations
Day 10 Video
In order to fully implement the mini-unit, the following texts should be acquired through school, public or university libraries. Those marked with an asterisk (*), I consider essential.


The teacher, during the introductory lesson, will give a short lecture on the lives of Stephens and Catherwood. Utilizing the encyclopedia would be sufficient for this exercise. Distribution and explanation of the bibliography is the most important task for this initial class. The teacher will explain the use and location of the suggested texts so that students will be able to decide what aspect of the mini-unit they wish to investigate and present.

Using 21 students as the average class size. There are seven categories listed above. Therefore seven groups of three students each will be the model for this unit. Each student must have a ring-binder notebook to hold all hand outs and related information. Each group must prepare summaries to be distributed at the end of each presentation. At the end of the mini-unit, the whole class will have accumulated a full notebook of information.

Topic A: The Yucatan. Location, Climate and Basic Geography. The group that chooses this topic should refer to several sources. The first would be any travel guide for Mexico that describes the Yucatan peninsula. The Michelin Guide is an excellent example of the quality information that is readily available in bookstores. The Michelin includes information on weather and average temperatures. In Incidents of Travel in Yucatan, (see appendix), Stephens has included daily temperatures for the periods when he and Catherwood lived and traveled in the region. Students may wish to compare those statistics with the currents meteorological information available from guides or from weather services. A large map of the area that can be hung in the classroom for the duration of the lesson is essential. The student team can explain to the rest of the class, the location of the Yucatan peninsula in relation to the rest of Mexico and point out the principal cities. Most student will probably be familiar with Cancun and Cozumel due to their popularity as tourist destinations. In Chapter III of Incidents of Travel in Yucatan, Stephens offers a history of
the region and the experiences of the first Europeans to see the area. In Chapter VI of the same, the derivation of the word Yucatan is discussed.

**Topic B: Earliest References to the Yucatan Peninsula.** Students in this group will find an interesting description of the Yucatan in Cortes' *Cartas de Relación*. From pages 14 to 24, Cortes describes his landing first as Cozumel and later, the mainland. Although this description is in Spanish, students in language classes at an advanced level will be able to translate this section. A short presentation on the life and deeds of Cortes would be very helpful in order to help the class understand the time period and the reasons for his travels and actions.

**Topic C: Early Mayan History.** For this section of the mini-unit, Michael Coe's *The Maya* is the key resource. In chapter two he describes the earliest Maya. In chapter 6, the post classic period and the arrival of the Spanish. In chapter 7, early Mayan life. The presenters of this segment can utilize a map of North America in order to show the migration of the earliest men and women who crossed the Bering Strait from Asia. The students may also discuss the climatic changes experienced by the earliest arrivals as they moved farther and farther south. Discussion of the time periods involved for this slow migration would be most beneficial. Students must understand that travel was by foot over uncharted territory.

**Topic D: Mayan Language.** As the glyphs found at the ancient sites fascinated Stephens and were clearly sketched by Catherwood, the written language of the Maya plays an important role in our journey to understand Stephens and Catherwood. For this student group, close teacher participation is essential. The deciphering of the written Maya language was a long and tedious project. The students should read in De Landa's *Yucatan Before and After the Conquest* pages 103-106. In Coe's work *Breaking the Maya Code*, a more detailed description is offered. I believe that students may find Coe's description of the techniques used difficult to understand. Chapter 3 discusses Catherwood and Stephens and their place in the history of Mayan archaeology and Chapter 10 offers an overview of language deciphering. In Houston's *Maya Glyphs*, students will find examples of basic glyphs that could be shown to the whole class. DeLanda shows the glyphs for the Days and the use of the calendar on pages 81-83.
Topic E: John Lloyd Stephens. After moving through the sections of the mini-unit as described above, it is time to learn more about J. L. Stephens. Von Hagen in his book Maya Explorer, offers a very interesting and readable story of the life of Stephens. As this is a long text, I would suggest that students divide the chapters and write short resumes of the most important information discussed in each chapter. A list of high points in his life could then be prepared for class distribution. A large poster board size copy of this list should be hung in the classroom for easy reference during the discussions to follow. Using the Yucatan map from topic A, these presenters could also mark out with pins or markers, the locations of some of the principal Maya ruins discovered by Stephens with Catherwood. On page 15 of Von Hagen's book there is a picture of Stephens. It is worth showing to the class and perhaps discussing the trends of the 19th century regarding clothing, hairstyles and the popularity of beards.

Topic F: Frederick Catherwood. Unfortunately, few authors have written about Catherwood. Victor Von Hagen has produced two short works F. Catherwood, Architect-Explorer and Frederick Catherwood, Architect. Once again, these books are easy to read and filled with useful information. Catherwood was never photographed so finding a written description of him is almost impossible. Von Hagen states that the fact that not even his closest friends ever left a detailed description of him. Special attention should be paid to the meeting of Stephens and Catherwood as described in Von Hagen's En Busca de los Mayas (also available in English) in chapter VI. A clear understanding of the talents of the two men is critical as is a knowledge of their 15 year friendship. Catherwood's skill as an artist has left us an incredible record of his views of the Mayan cities that he and Stephens visited. This student group should present some of the drawings done by Catherwood. Incidents of Travel in Yucatan has many included in the text. These could be copied onto overhead transparencies so that the whole class may see his expertise. Using Ferguson and Royce's Maya Ruins of Mexico in Color, the class will be able to compare the original drawings of Catherwood with modern day photographs of the same areas. The presenting group should point out that modern pictures show, for the most part, reconstructed temples and buildings while Catherwood and Stephens saw the same areas after years of abandonment and jungle growth. This discussion of the changes that have taken place at the Mayan sites is very important.
**Topic G: Modern Research Regarding the Maya.** After a discussion of the lives and contributions of Stephens and Catherwood. The question of Mayan research in the 90's is appropriate. Sabloff's *The New Archaeology and the Ancient Maya* is a good tool to help this presenting group discuss new trends in research. Pictures and diagrams presented in this book are quite useful and easily understandable. Chapter VI: Archaeology and the Modern World is important.

It is obvious that the students in this class have to do a great deal of work outside of the classroom. As the students are working in groups, the tasks involved should not be so taxing. The keeping of all information in a ring binder notebook will facilitate a clearer understanding of the whole picture at the end of the mini-unit.

As my school system is located quite close to the cities of Cambridge and Boston, Massachusetts, field trips to Harvard University, the Boston Public Library and local universities are easily arranged.

The *Peabody Museum of Archaeology and Ethnology* at Harvard University houses a wonderful collection of Mayan materials. Glyphs, murals, stelae and models of temples are all on display. An excellent staff is available to offer tours to student groups. I would consider this museum as the perfect place to plan a field trip for students who had now acquired a knowledge of the Maya and most especially Stephens and Catherwood. The materials on display would take on greater meaning once the students have a firm knowledge base. For example, several stelae on display have translations of the carved glyphs. Members of the group that presented on the Mayan language may enjoy trying to recognize one or even more of the glyphs and explaining them to the rest of the class. Students who show a desire to learn even more, may ask to see some of the artifacts held in the archives of the museum.

Another follow-up to the museum visit, is to make a visit to an area, in our school district, where native American artifacts have been found. The opportunity to speak with archaeologists working in our local community will help the students understand that archaeology is a living science.
The Boston Public Library has an extensive collection on native Americans and early research on their development and migrations. Some of Catherwood's drawings are available for viewing in folio form.

O'Neill and Bapst libraries at Boston College hold a large number of books that describe the exploits of Stephens and Catherwood. As a pre-mini-unit field trip, students could visit the university library and learn how to run a topic search by computer.

The world famous Bachrach Photographic Studios are located in our community. A visit to the studio would offer students the opportunity to see early photographic equipment, some of which may be similar to the equipment used by Catherwood. Experts in the field can also show students examples of early photographs from the 19th century and discuss the difficulties faced by early photographers.

The viewing of the Uxmal segment (first half) of the video Ciudades del Mexico Antiguo (English version) produced by C/Producciones, Mexico, is an excellent way to end the mini-unit. In preparation students should read in Incidents of Travel in Yucatan chapters VII and VIII which describe the arrival of Stephens and Catherwood at Uxmal. The video tells the story of Stephens and Catherwood as they first encounter the Mayan city of Uxmal. The video was made at the actual site and the students can easily see the difficulties faced by the two explores as they drew, measured and stood in awe of this magnificent city.

With this type of mini-unit, there are great opportunities for interdepartmental cooperation. History teachers could be invited to discuss the Maya in greater detail and offer a picture of the rise and fall of the classic Mayan civilization. English teachers may offer an idea of the importance of the written word in the 19th century. Especially noting the popularity of journals and diaries due to the lack of easily usable photographic equipment and the total lack of our video camera recording systems. The science department could offer a lesson on malaria (the ultimate cause of Stephens' death) and other insect related tropical diseases (see Incidents of Travel in Yucatan chapters XII and XV that describe attacks of fever).
Other class activities might include:

Students taking on the roles of Stephens and Catherwood by visiting locations in our community that are new to them. For example, a new store, restaurant or cinema complex. Those students playing the role of Stephens would write a very detailed description of the new place visited while those playing Catherwood would have to draw the location. Whole class presentations would then be made and the students could discuss their own descriptive styles compared to those of Stephens and Catherwood.

Frederick Catherwood died when the S.S. Arctic sank in the Atlantic in 1854. Several students could research this event at libraries holding microfiche copies of related newspaper articles.

In later life, Stephens worked designing a rail line in Panama. He saw the importance of this area as the site for travel between the Atlantic and the Pacific oceans. Students may research, see Von Hagen Maya Explorer chapter XXI, Stephens' role in the development of this area.

Dr. Samuel Cabot accompanied Stephens and Catherwood for a period of time during their second visit to Central America, see Incidents of Travel in Yucatan chapter V. Dr. Cabot later returned to Boston and was very active in the underground railroad movement that helped escaped slaves reach Canada. Students may research Dr. Cabot due to his local roots.

Edgar Alan Poe was one of the first reviewer's of Stephens' published accounts of his journeys. Students may seek out copies of these reviews. Again due to the local interest attached to Poe.

Each teacher will find other topics that will be of interest to his/her classes. By utilizing the books listed in the bibliography their work will be made easier.
Spanish language teachers may adapt this mini-unit to allow the information to be presented completely in Spanish. Allowances would have to be made for student ability levels. Some students could do the regular readings in English and prepare their oral presentations in Spanish. For most high school age learners of Spanish, Von Hagen's *En Busca de los Maya* would become the basic text for the mini-unit. With the close supervision of the teacher, students could prepare modified presentations based on the suggestions in this unit guide. Teachers should narrow the topics to those that deal directly with Catherwood and Stephens, therefore limiting comprehension difficulties in the second language.

A Spanish language version of this mini-unit would therefore be shorter and much more limited in scope. The teacher would have to decide the goals: choosing language skills improvement through oral presentations and written assignments or the mastery of simple biographical information on Stephens and Catherwood through the Spanish text available.