FRONTIERS

A&M researchers study Antarctic core samples

By JILL REED Science writer

Texas A&M researchers in the Ocean Drilling Program are studying Antarctic core samples to learn about the history of Earth's environment and to learn how to predict future global climate changes.

Dr. Peter Barker, a researcher with the Ocean Drilling Program, is a co-chief for a twomonth leg of the ongoing climate study expe-

"We want to determine the history of the West Antarctic ice sheet for the last six to ten million years," Barker said.

Barker said it is important to understand the Antarctic ice sheet, which is a major component

"When we prove the method works, the next step will be to look at the East Antarctic margin in the same way," Barker said.

The East Antarctic ice sheet is larger and over 30 million years older than the west sheet,

Barker said this leg of the expedition will help resolve arguments about ice sheet stability.

tory of the ice sheet and what caused it to grow, so we can know the short-term stability of the ice sheet for the next 50 years or so.'

Geologists use nine-and-a-half-meter-long core samples to answer questions about changes in the global environment, crust movement and deformation, fluids and petrochemicals in the crust and evolution and extinction of

'We need data from several locations to determine the full history, but this drilling leg will give us the proper method to do this," Barker said.

Sediment layers containing animal remains represent the periods of time when the Earth's

Past deep-water core sample studies have determined that a huge meteorite crashed into the Earth 65 million years ago and the floor of the Atlantic is widening while the floor of the Pacific is shrinking.

Ocean-drilling research also has found that the Mediterranean Sea once dried up and later refilled

"We want to determine the history of the West Antarctic ice sheet for the last six to ten million years."

> Dr. Peter Barker Ocean Drilling Program

and the Great Barrier Reef, off Northeastern Australia is less than one million years old.

Crews aboard the drilling vessel work twelvehour shifts seven days a week drilling and analyzing core samples taken from up to 850 feet below sea level.

Each core sample represents up to ten million years of Earth's history.

Aaron Woods, a spokesperson for the Ocean Drilling Program, said Texas A&M is responsible for about half of the \$47 million appropriation funded by the National Science Foundation and other international interests.

Woods said A&M handles many facets of the program including ship operations, engineering and drilling operations, administration, publication of data and results, computer systems and core sample storage and curation.

Baboon pair bonds early relative human marriage, researcher sa

By BRIAN VASTAG Special to The Battalion

Female baboons who align themselves with male "friends" to protect their young are leading researchers toward possible prehistoric origins of marriage.

'Marriage is far, far more than simply a mating relationship," said the University of Pennsylvania's Ryne Palombit, who studies pair bonds, the animal equivalent of marriage. "It has very important social aspects.

Throughout history, social reasons for marriage include forming alliances, sustaining culture and sharing food. Traditionally, researchers have focused on food sharing as the primary motivation for pair bonds, but Palombit believes his African baboon studies suggest another reason. Pair bonds may have evolved, both in animals and in early humans, to protect infants from murder.

Forty percent of baboon babies studied by Palombit on the grasslands of Botswana were killed by a single dominant male. This male kills to monopolize his mating opportunities.

After an infant is killed, its mother stops lactating and her regular menstrual cycle resumes. Within a few months, she is ready to mate again. Invariably, the dominant male mates with her. Through this killing and mating, the dominant male effectively replaces another baboon's offspring with his own, giving his genes improved chances for survival.

Primate infanticide, first reported by Sarah Hrdy at the University of California at Davis, intrigued Palombit so much that he has made several trips

to study it. After watching the chacma baboons, a subspecies of savannah baboons, Palombit observed males and females forming apparently nonsexual "friendships," or pair bonds. The pairs spent much more time together when infants were present, supporting the idea that male friends protected the infants. Palombit want-

He and his colleagues considered waiting for infanticide attacks to see how the male friends responded. But when infanticides proved too difficult to observe, they decided to simulate infanticide. Using hidden speakers playing recordings of male attack cries and female distress screams, the researchers ran a series of tests. They found that the male friends responded more aggressively to the simulated attacks than other male baboons: More support for the theory that friendships serve to protect the young.

Our early human ancestors may have been infanticidal as well, Palombit said. Chimpanzees, which share over 98 percent of our DNA, are occasionally infanticidal and baboons live in a savannah environment much like that of early early humans. These two factors support infanticidal, and that pair bonds and later marriage - evolved for infant protection, Palombit said.

Though it is easy to envision a ed to save the children, it is tough to

"It is difficult to know if people were infanticidal in the past," Palombit said, "since there are no fossils of dred-thousand-year-

Another problem wi is that no one knows baboons protect their promise to help exp they are protecting the protecting their lines evolutionary commo they are not the father searchers will need ou

Lee Cronk, a Texas A ogy professor, said then answer for the origin

"What works for o not work for another Palombit's work w mates like gibbons, w ily groups much like ports Cronk's statem sure of infanticide; the

reasons for pairing.
People probably de riage for many reasons are multiple evolutionar bonds," said Palombia need to be open to then

He added that addi on baboons, includi paternity tests, will co to a better understa

Palombit presente at the annual meeting can Association for ment of Science las lished in the journal Anthropology later this

Study the

Greatest Conflict of this Century,

in Normandy, France

SS II 1998

TEXAS A&M **TUEBINGEN** Are offering a reciprocal exchange program that allows TAMU students with 4 semesters of college German to spend the 1998-99 academic year in Germany! INFORMATIONAL MEETINGS: Wednesday 3/4 4:00-5:00pm 3/6 10:00-11:00am 3/10 4:00-5:00pm Tuesday Room 154 Bizzell Hall West Requirements: 3.0 GPR, U.S. Citizen, and Junior status at time of exchange



English Second language

Conversational **English Classes**

For student, staff. family

Beginning, intermediate, advanced Small group lessons (Behind On the Border) FREE ONE WEEK

TRIAL!

For information

call or visit

1:00 to 5:00

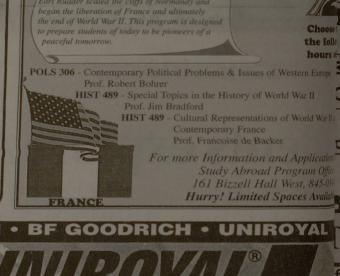
Monday-Friday

707 Texas Ave.

Suite 210 Bldg. D

696-6583

RES



Tiffany Inbody, Editor in Chief

Helen Clancy, Copy Chief Brad Graeber, Visual Arts Editor Robert Smith, City Editor Jeremy Furtick, Sports Editor Jeff Webb, Sports Editor James Francis, Aggielife Editor Mandy Cater, Opinion Editor Ryan Rogers, Photo Editor Chris Huffines, Radio Producer Sarah Goldston, Radio Producer Dusty Moer, Web Editor Aaron Meier, Night News Editor

McDonald Building. Newsroom phone: 845-3313; Fax: 845-2647; Eail: batt@unix.tamu.edu; Website: http://battalion.tamu.edu dvertising: Publication of advertising does not imply sponsorship endorsement by The Battalion. For campus, local, and national display advertising, call 845-2696. For classified advertising, call 845-0569. Advertising offices are in 015 Reed McDonald, and office hours are 8

News: The Battalion news department is managed by students

<u>Subscriptions:</u> A part of the Student Services Fee entitles each Texas A&M student to pick up a single copy of The Battalion. Mail subscrip-tions are \$60 per school year, \$30 for the fall or spring semester and \$17.50 for the summer. To charge by Visa, MasterCard, Discover, of American Express, call 845-2611.

THE BATTALION (ISSN #1055-4726) is published daily, Monday through Friday during the fall spring semesters and Monday through Thursday during the summer session (except University holidays and exam peristation, TX 77840. Postmaster: Send address changes to The attailion, 015 Reed McDonald Building, Texas A&M University ollege Station, TX 77843-1111.

THE BATTALION Classified Advertising

EasyAffordable

Effective

For information, call 845-0569



Reaction/Mechanism Packets!

Mon. 3/9 Tue. 3/10 Part 1 (Chapter 17)

Part 2 (Chapter 18) Part 3 (Chapter 19 If Needed/Tests) Wed. 3/11

101/102 Test/Lab/Hmw StudyPackets!

Also For: Biology 113/114; Sociology 205; Psychology 107; Physics 201/202/218; Geology 101

260-2660

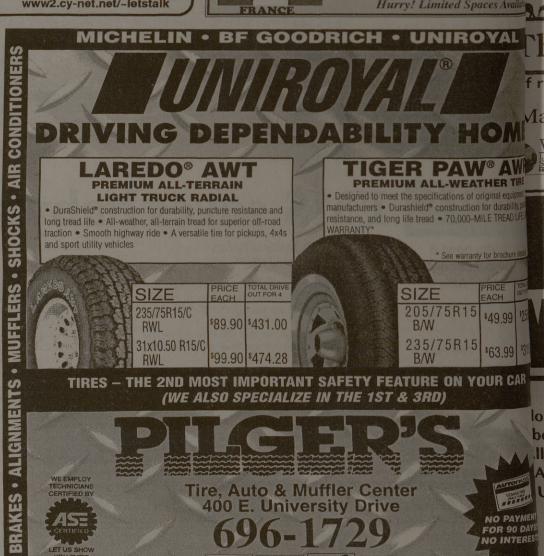
Visit our web site: http://www.howdyags.com

SCIENCE		MON	TUE	WED	THU
		Mar 9	Mar 10	Mar 11	Mar 12
CHEM	4-8	CH	CH	CH	PRAC
107	PM	6	7, 8	9	TEST
CHEM	8-10	CH	CH	CH	CH
102	PM	17	18A	18B	19
PHYS	10 PM-	СН	CH	СН	СН
218 1 AM		6	7 ON	8	9 IF

218	10 PM-	6	7	8 8	9
SCIENCE		MON Mar 9		TUE Mar 10	
BIOL 113		PART 1 4-6 PM	PART 2 9-11 PM	PART 3 4-6 PM	PART 4 9-11 PM
BUSINESS		MON Mar 9		TUE Mar 10	
FILIC					

6-10 PM

341



MICHELIN • BF GOODRICH • UNIROYAL PROFITABLE NUMBER! 845-0569 THE BATTALION Classified Adve

Tire, Auto & Muffler Center

400 E. University Drive

NO PAYME