

AnthroNotes

National Museum of Natural History Bulletin for Teachers

Vol. 18 No. 1 Winter 1996

FORGET THE OLD LABELS: HERE'S A NEW WAY TO LOOK AT RACE

by Boyce Rensberger

You're not a racist. You know that deep down inside, all people are pretty much the same, no matter what color their skin or what shape their eyelids.

But you are curious about differences among these groups that we call races. Everybody is.

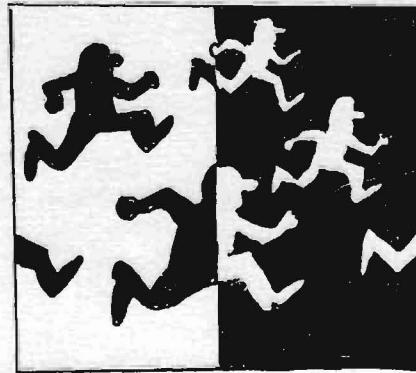
Why do most people from Europe have pale skin? Why is the hair of Africans tightly curled? Why do most Africans and most Europeans--and their descendants in this country--have eyes that are shaped alike but are so different from an Asian's eyes. Or maybe you wonder why people come in so many colors and facial forms in the first place. And many people wonder whether the differences are more than skin deep.

These are honest, scientifically worthy questions. In fact, scientists have tried for centuries to answer them. After discarding many mistakes in their interpretations, today's researchers generally agree on three major discoveries.

1. There are many more differences among people than the obvious ones such as skin color and facial form. Dozens of other variations have been found that are more than skin deep. We'll look at some of them shortly.
2. These differences have been good for the human species. If we were not so diverse, we would not

be such an evolutionary success. For example, without the protection of dark skin, our ancestors in Africa could not have survived the strong tropical sun.

And when some of those ancestors migrated to the climate of northern Europe, where there is less sunlight, they could not have survived unless they lost most of their skin color. We'll get back to this too.

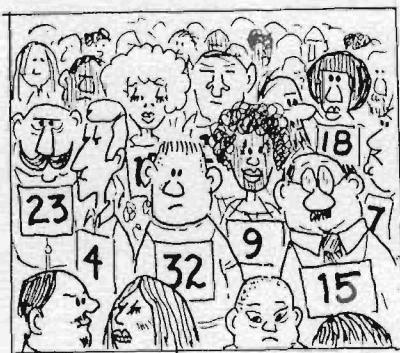


3. The third conclusion is probably the hardest to understand--races don't really exist, at least not outside our imaginations. We all use the word "race" as if it meant something specific and clear-cut. We talk and act as if blacks, whites and others belong to different groups that developed naturally long ago. But, according to most anthropologists today, that isn't true. They say races are mostly arbitrary categories invented by people to fit a misunderstanding about how human beings evolved.

A few centuries ago, European scientists claimed that races were natural divisions of the human species. Some even argued that races represented a series of evolutionary stages, some "more advanced" than others. The old-time researchers knew of very few differences among various peoples and did not fully understand how evolution works. In fact, the concept of race was developed long before 1859, when Charles Darwin, the English naturalist, published his discoveries about evolution.

In 1735, Carl von Linne, the Swedish naturalist better known as Linnaeus, said there were four races. Over the years dozens of other classifications have been proposed, some arguing that there are as many as 31 or even 37 races.

Today, anthropologists are aware of many differences that were never noticed before and that don't correspond to racial categories. More important, the more that researchers study people worldwide, the more they realize that if they take into account all the hidden differences, they get a very different picture of what is similar or dissimilar among groups. If you consider each feature by itself, you see that a person of one race can be more like a person of another race than he or she is like someone of their own race.



Take blood for example. African blacks may be any of the four major blood types: A, B, O and AB. The same is true of European whites and of Asiatic peoples. If you're a type O, your blood is more closely related to that of any other type O person--regardless of race--than it is to a type B or type A of your own race. If you need a blood transfusion, you shouldn't care whether the donor's skin color is like

yours; you want someone with blood like yours. The same is true of organ transplants. Your closest genetic match for a donated kidney, for example, could easily be somebody of another "race."

The same race-blind relationships are true of many physical factors, from the critical to the trivial. Take ear wax, which comes in two kinds. One is wet and sticky; the other is dry and crumbly. The vast majority of Africans and Europeans have the same kind--wet and sticky--while the vast majority of Asians have the dry kind.



We can also look at racial differences from another angle. Lots of people think that skin color is a major factor in pigeonholing people in racial groups. Yes, it is true that most Africans and their descendants have skin that is darker than that of most Europeans and their descendants. But millions of people in India, classified by some anthropologists as members of the "Caucasoid," or "white," race, have darker skin than most Americans who call themselves black. Does their black skin mean that they should be grouped with black Africans? Or does their straight hair mean they should be grouped with Europeans?

Also, many "Negroid" people living in sub-Saharan Africa today (such as the !Kung San, or Bushmen) have skin no darker than that of many Mediterranean people such as the Spaniards, Italians, and Greeks. And there are people in New Guinea who are as black and woolly-haired as any African but have no known ancestral links to Africa.

And here's another angle to think about. If you want to classify all black Africans in one group, how do you deal with the fact that within Africa live

several kinds of people with much more dramatic differences than skin color. There are the world's smallest people, the Mbuti pygmies of Zaire who average 4-foot-7 and whose size is very similar to that of a group in the Philippines called the Negritos. And there are the world's tallest, the Tutsi of Rwanda, who average 6-foot-1--close to the average for the very pale-skinned Scandinavian peoples. The two African ethnic groups live just a few hundred miles apart but have remained separate. In size, they more closely resemble other ethnic groups who live very far away.

Among Africans are still other kinds of diversity that are more than skin deep. Such differences within the usual broad racial groups have led most anthropologists to say it makes no sense to think that races are biological categories. You can classify specific traits but not people who are bundles of different combinations of traits.

Sherwood L. Washburn, an anthropologist at the University of California at Berkeley, has long questioned the usefulness of racial classification. "Since races are open systems which are integrating, the number of races will depend on the purpose of the classification," he says. "I think we should require people who propose a classification of races to state in the first place why they wish to divide the human species."

The overwhelming conclusion of anthropologists, in short, is that no physical feature distinguishes any race. Not even a combination of traits will do the job.

SO HOW COME PEOPLE ARE DIFFERENT?

Biologists say most racial differences arose as a result of a process called natural selection. This is the phenomenon that Darwin discovered in the 19th century, and it explains a lot about how evolution happens. In a nutshell, it means that if a mutation--a change in a person's genes--produces a useful feature, the person with that change is more likely to be healthier, live longer and, most important for

evolution, have more children. Since the change is in the genes, the children inherit it. Because the change gives each person an advantage in survival, eventually those with it will outnumber those without it.

Skin color provides an excellent example. People whose ancestors have lived a long time in the tropics have dark skin. And the farther people live from the equator, the lighter their skin. Even southern Europeans usually are darker than northern Europeans. In Africa, the darkest skins are near the equator, but at the north and south ends of the continent, the skins are lighter. In southern India, many people are as dark as the blackest Africans while northern Indians are about as light as southern Europeans. Whatever the skin color, it is all due to different amounts of a dark brown substance called melanin.

This north-south spectrum has evolved in response to the sun's intensity in local regions. Too much sun causes sunburn and skin cancer. Too little deprives the body of vitamin D. Without this vitamin, bones grow crooked, resulting in a disease called rickets. In the tropics, the sun is so strong that enough gets through dark skin to make all the vitamin D a person needs.

When dark-skinned people first migrated out of Africa and into northern climates, they may well have suffered rickets, which also can deform the pelvis, making childbirth dangerous or impossible. But because skin color can vary slightly even within a family, lighter-skinned children would be less affected. As a result they would probably have more children than their darker relatives. And those children would be even more likely to have lighter-skinned children of their own.

After many generations, the natural effect of the combination of dark skin and low sunlight would select for people who had lost more and more of their original color. This is Darwin's natural selection at work.

Only a few external differences other than color appear to provide a survival advantage. The strongest case can be made for nose shape. People native to colder or drier climates tend to have longer, more beak-shaped noses than those living in hot and humid regions. This is because the nose's job is to warm and humidify air before it reaches the sensitive lungs. The longer the air's path to the lungs, the warmer and more humid the air.



Migration is a key player in the evolutionary drama. Geneticists know that if all members of a species stay in one breeding population, all will stay the same or change in the same ways. But if some members move away and become isolated from the rest of the species, the two groups evolve in different ways. Any mutation in one group eventually can change it forever but can have no effect on the other group--as long as the two don't interbreed.

Human beings are very mobile. They like to pull up stakes and move long distances before settling down. Many times the migratory group loses all contact with the old folks at home. This is why hundreds of different languages have developed. If our ancestors had stayed in touch over thousands of years, we'd probably all speak the same language today. Another result of losing touch is reproductive isolation, which means that any changes in the genes cannot be transmitted to another group.

The fact that people of so many different physical types do exist is proof of long periods of reproductive isolation.

SEXUAL SELECTION PLAYS A ROLE

Aside from the examples above, there is little evidence that any other visible differences among people have any practical advantage. For example, nobody knows why Asiatic people have that special form of upper eyelid or flatter facial profiles.

The thin lips of northern Europeans and many Asians have no known advantage over the full lips of many Africans and Middle Eastern peoples. Why do middle-aged white men go bald so much more often than men of other backgrounds? Why does the skin of the !Kung San, or Bushmen, wrinkle so heavily in middle age when that of most other Africans resists wrinkling far better than that of Europeans?

One possible explanation is another evolutionary process that Darwin also discovered--sexual selection. This differs from natural selection, in which the environment chooses who will survive. In sexual selection, the choice is up to the prospective mate.

In simple terms, ugly persons will be less likely to find mates and pass on their genes than will beautiful people. And, of course the definition of beauty varies from culture to culture. Consider the fact that white Europeans and their descendants are usually so much hairier than Africans or Asians. Some anthropologists have suggested that this evolved because white women, like female lions, preferred males with imposing facial fur.

There is a third way that differences can appear in isolated groups--especially traits that are neither good nor bad for a person. Imagine a family with straight finger prints. If the children marry people with curved finger prints, their new genes (offering no advantage) might never become common., or might even disappear. But if this one family strikes out on its own and founds a new settlement in some

remote region, straight finger prints eventually might be the rule among all the family's descendants. This kind of evolution is called genetic drift.

Although reproductive isolation is essential to produce differences, there is plenty of evidence that no group of humans has stayed isolated for more than a few thousand years. For one thing, a very long separation between two groups allows their genes to become so different that the groups no longer can interbreed. The fact that all peoples can intermarry and have healthy children proves that we all remain members of the same species. Our differences are trivial in a biological sense. In fact, geneticists have estimated that the variations in genetic makeup that account for racial differences occupy only about 0.01 percent of our genes.

SO, WERE THERE EVER PURE RACES?

Until the mid-20th century, most researchers assumed that so-called pure races once existed. Those early thinkers had great trouble figuring out who belonged in which race and decided that was simply because migrations and intermarriage had mixed up, or blended, the once-distinct traits. Today, most anthropologists hold that pure races never existed. They think that human beings have always been migrating and intermarrying, spreading new genes worldwide.

Genes useful in all parts of the world would spread quickly--those, for example, that might improve the immune system. Surely the fastest to spread were the genes that improved the brain. In fact, anthropologists who study the earliest human beings agree that a fully modern brain evolved long before any of today's races came into existence.

Genes useful only in some areas would tend not to become common when they were carried to other places. Dark skin, for example, is not an advantage in cold climates. Light skin is a serious disadvantage in tropical climates. So skin color genes could not flow far and persist, at least not until the age of milk fortified with vitamin D, large hats, and long sleeves.



Still, many genes that had no significant good or bad effects--such as those of blood type or ear wax, can spread far and did. But few have come to 100 percent prevalence anywhere. In fact, the varying degrees of prevalence of certain traits provides a clue to the kind of race mixing and genetic blending that has always been part of human history.

Look at the three maps with this article. They plot the Old World distribution of three major genetically controlled features: type-A blood and two supposed markers of race--hair form and skin color. The traits are largely independent of one another. No combination of traits can be offered as defining any race.

The bottom line, anthropologists agree, is that the science does not support the idea of races as natural units, now or in the past. You cannot pick just one or even a few traits and claim that they define a biological category. People have tried to do this using the most visible features such as skin color, facial form, but have ignored all unseen genetic variability, which doesn't fit the visible pattern.

Perhaps if humans were blind to everything but ear wax, we would say there are two races. If all that mattered was ABO bloodtype, we would argue that there are four races.

SO WHAT?

After the many misunderstandings of the past, the great lesson of anthropology, biology and genetics

is that all people are the same in the essentials but are highly diverse in a few things. These differences have arisen not because there are fundamentally different kinds of people but simply because we are a restless, curious, hopeful migratory species whose intelligence has allowed us to make a good living in almost every environment on Earth.

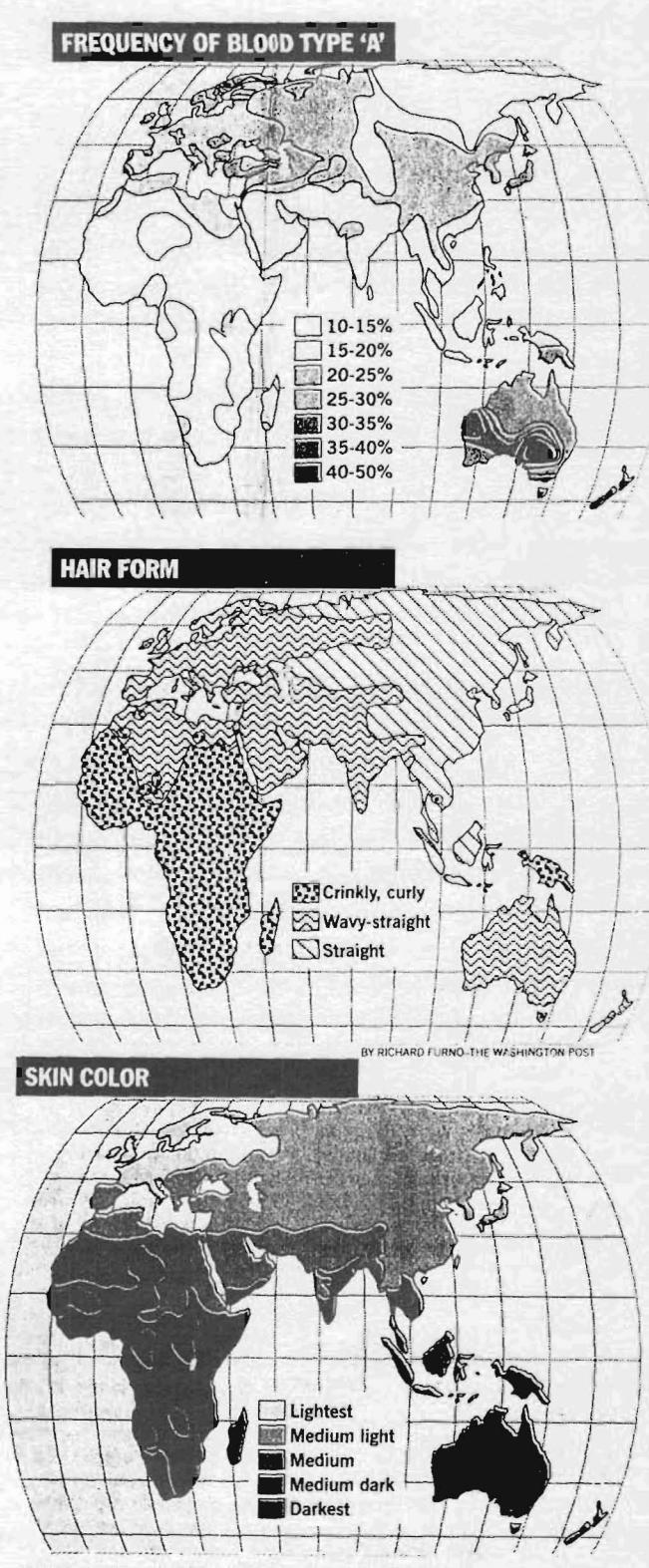
Human beings are more mobile than ever, and genes are flowing farther and more widely than ever. In many parts of the world this is blending once-diverse features. But if the past is a guide, no amount of blending is likely to take away the diversity that has made the human species so successful and that surely will prove useful as the environment on Earth changes in centuries ahead.

SET UP YOUR OWN RACIAL CLASSIFICATION

If there really are races, shouldn't you be able to see them in maps like these? The maps show the distribution of three genetic traits, all in people whose ancestors have lived in each area since ancient times. Where would you draw the racial boundaries?

The fact is that these and all other variable traits are distributed independently. In other words, just because you have one trait, it has nothing to do with whether you have another one. Consider the aborigines of Australia. Their hair form (wavy-straight) is like that of European whites. Their skin color is like that of African blacks. And their prevalence of blood type A resembles that of a huge swath of the world from Europe to southern Asia.

You might think it would help to consider additional features such as the shapes of noses, lips and eyes. But it doesn't. They, too, are independently distributed and maps showing their distribution would be even more confusing.



SOURCE: "The Kinds of Mankind," by Morton Klass and Hal Hellman

RACE AND INTELLIGENCE

Arguments that one human population is intellectually superior to another are fairly new in human history, dating mainly from the time of massive enslavement of Africans. The idea of using Africans in the New World, however, grew out of the racist assumption that they were superior to the American Indians. Bartolome de las Casas, a Spanish priest of the 1500s, argued that Indians being enslaved by the Spanish conquerors were not up to the "civilized" work demanded of them in farming, mining and industry. He argued that the colonial rulers should import more advanced peoples such as Africans.

Much later, when some people challenged the morality of slavery, defenders claimed that Africans were not fully human, especially in intellect.

In modern times, researchers have made many tests of the mental powers of all groups of people and repeatedly found that if they test people of equivalent social and educational background, they find no significant differences. In 1961, the council of the American Anthropological Association ruled unanimously that it knew of no evidence that any population was less capable than any other of participating fully in modern, complex society. Further studies have reinforced that conclusion.♦

If you want to know more, here are three good books:

Human Variation: Races, Types and Ethnic Groups. 3rd ed. by Stephen Molnar. Prentice Hall, 1992. (A detailed look at what science knows about variation among humans.)

The Mismeasure of Man by Stephen Jay Gould. Norton, 1981. (A highly readable treatment of science's early misadventures, some brutal and tragic, with the concept of race.)

The Evolution of Racism by Pat Shipman. Simon & Schuster, 1994. (A history of race theory and racism from Darwin's day through the ill-conceived eugenics movement and Nazism to the modern view.)



[This article was originally published in the Horizon Section of *The Washington Post*, Wednesday, November 16, 1994. Reprinted with permission, 1994 *The Washington Post*]

Boyce Rensberger is a science writer for *The Washington Post*.

About Boyce Rensberger:

Boyce Rensberger is the creator and editor of the Horizon Section of the *Washington Post*, published the second Wednesday of each month. He chose the provocative topic of race as the first Horizon article, reprinted here. His research into race was generated out of curiosity, and a belief that it was time to address the issue "for which there is a lot of interest and misunderstanding."

Rensberger, who has an undergraduate degree in zoology, has been a science writer for newspapers and magazines for the past thirty years. Prior to coming to *The Washington Post* ten years ago, Rensberger was science editor of *Science 1980* from 1981-84 and for eight years a writer for the *New York Times*. He finds his stories by reading scientific journals and magazines and by attending professional meetings to learn about new developments in the sciences.

Rensberger has long been interested in anthropology, particularly human evolution and physical anthropology. In the 1970s, his interest piqued while spending a year in East Africa at sites well-known for evidence of early human activity, namely Olduvai Gorge and Koobi Fora, working with scientists such as Donald Johanson, F. Clark Howell, and various members of the Leakey family.

1996 SUMMER FIELDWORK OPPORTUNITIES

A regular feature of the *AnthroNotes* winter issue, this article suggests ways teachers and students can become more personally involved in the field of anthropology. This summer, opportunities exist to work alongside archaeologists in China to investigate early human sites, to excavate 13th century Pueblo villages in the Southwest, to research tourism in Costa Rica while living with a local family, or to learn about the arts and crafts of West Africa. But don't ignore the opportunities in your own backyard; we explain how you can learn about them too. Let us know about your fieldwork experience and if you would recommend it to other readers.

ORGANIZATIONS TO CONTACT

Anthropology departments at local universities and colleges, state historic preservation offices, and state archaeological societies often organize local archaeological excavations and frequently accept volunteers with no previous fieldwork experience. The Archaeological Institute of America (AIA) offers a listing of state archeologists as part of its yearly field school listing for the U.S. and abroad. This publication includes over 250 opportunities with all information about costs, deadlines, age requirements, and archaeological sites to be excavated and analyzed for each field school. The cost for the *Archaeological Fieldwork Opportunities Bulletin*, including shipping and handling, is \$9.00 for members and \$11.00 for non-members, plus \$4 for shipping and handling. Send orders and make checks payable to: Kendall-Hunt Publishing Co., Order Department, 4050 Westmark Drive, Dubuque, IA 52002; you may also charge your order to Visa or Mastercard by calling (800) 228-0810 or (319) 589-1000.

Archaeology magazine, published by the AIA, features an archaeology travel guide to sites open to the public in the Old World (March/April issue) and the New World (May/June issue).

Several organizations offer volunteer public participation in worldwide research expeditions. Many of the organizations listed below are non-profit, and participation fees may be treated as tax-deductible contributions.

University Research Expeditions Program

University of California
2223 Fulton, 4th Floor
Berkeley, CA 94720
(510) 642-6586

Over 25 programs, including several archaeological projects, are open to the general public. No background or prior experience is necessary.

Earthwatch

680 Mount Auburn Street, Box 403
Watertown, MA 02272
(800) 776-0188; (617) 926-8200
Scholarships are available for teachers.

Foundation for Field Research

P.O. Box 2010
Alpine, CA 91903
or
Dept. P., P.O. Box 771
St. George's, Grenada (West Indies)
(809) 440-8854

SELECTED FIELD SCHOOLS

Abbé Museum Field School Experiences are concentrating on a large shell midden coastal site, occupied 4,000 years old, on Frenchman's Bay. The site, originally excavated in the 1940s, contains an abundance of stone tools and pottery and faunal remains. Write: Abbé Museum, P.O. Box 286, Bar Harbor, ME 04609, (207) 288-3519.

George Washington University is offering three field programs. 1) Paleoanthropology in northern China. Zhoukoudian is the Lower to Middle Paleolithic site that contains the remains of individuals that inhabited the area between 500,000 and 250,000 years ago, and where Peking Man was found. In cooperation with the Institute of Vertebrate Paleontology and Paleoanthropology,

Academia Sinica, the University will set up a center for teaching and research. Two field sessions are scheduled: June 1-26 and June 26-July 20. In addition to excavating, participants will visit the cities of Beijing and Xian and important sights such as the Great Wall, the Palace Museum, and the Mausoleum of Qin Shi Huang. Write: Xiang-Qing Shao, Department of Anthropology, George Washington University, Washington, DC 20052, (202) 994-6075, anth@gwis2.circ.gwu.edu.

2) Prehistoric Archaeology in Catacamas, Honduras at Rio Talgua caves, Preclassic, pre-Maya occupation and ossuary sites, June 8-29. Non-credit volunteer positions also available. Write to Dr. James Brady at the above address. 3) Historical Archaeology in Alexandria, Virginia (17th century to the present), May 21 to June 1. Write: Dr. Pamela Cressey, Alexandria Archaeology, 105 N. Union St., Alexandria, VA 22314, (703) 838-4399, Email alexarch@gwis2.circ.gwu.edu.

Prehistoric Archaeology at Rudd Creek, Arizona is the site of Pueblo III villages dating AD 1200-1300. This project seeks to understand the social, economic, and political organization that characterized 13th century towns along the upper Little Colorado River, and how these towns interacted with contemporaneous Pueblo (Hopi and Zuni) and Mogollon populations. Five week field school, June 5 through July 7. Application deadline, April 5. Write: Dr. Todd Howell, Department of Anthropology, Box 872402, Arizona State University, Tempe, AZ 85287-2402, (602) 965-6213, Fax (602) 965-7671; Todd.Howell@asu.edu.

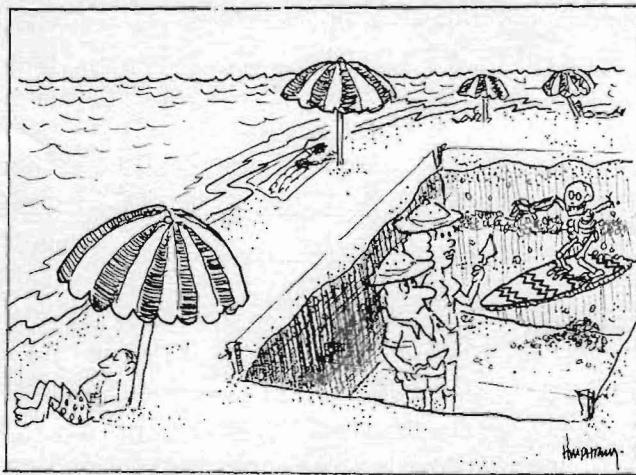
Crow Canyon Archaeological Center is a non-profit institution specializing in Southwestern archaeological research and education. Programs for middle and high school students and adults throughout the year introduce participants to archaeological field methods, laboratory techniques, and excavation. Write or call: Crow Canyon Archaeological Center, 23390 County Road K, Cortez, CO 81321; (800) 422-8975 or (303) 565-8975.

Center for American Archeology, Kampsville Archeological Center conducts one to five week

field schools for adults and high school students, June 2 through July 6. A field school with Individualized Mentored Research for high school juniors and seniors will be held July 17 through August 17. Volunteers can participate in site opening and closing excavations. Special Educators' Outreach weeks are July 28 through August 17. Scholarships are available for American Indian students. Write: Harry Murphy or Brenda Nord, Education Program, Center for American Archeology, PO Box 366, Kampsville, IL 62053-0366; or call (618) 653-4316.

Summer Abroad through World Learning, Inc., The U.S. Experiment in International Living, offers students opportunities to learn about another culture through homestay, language-study, and ecologically-focused programs. Write: World Learning, Inc., The U.S. Experiment in International Living, P.O. Box 676, Kipling Rd., Brattleboro, VT 05302-0676; (800) 345-2929 or (802) 258-3173.

Summer Ethnographic Field School in Costa Rica, May 8 to June 11, will investigate the problems of tourism development in towns and villages near national parks and beaches in western Costa Rica. Students will live with Costa Rican families. Prerequisites are six credit hours of anthropology and at least the equivalent of two semesters of college Spanish. Write: Dr. Tim Wallace, Costa Rica Field School, Department of Sociology & Anthropology, Box 8107, North Carolina State University, Raleigh, NC 27695-8107; (919) 515-2491 (office) or (919) 781-8655 (home); Fax (919) 515-2610.



Drew University in West Africa offers a comprehensive study of West African art and culture in Côte d'Ivoire (July 20 through August 17). In the Côte d'Ivoire, students will learn through apprenticeships about West African arts and crafts. Undergraduate or graduate credit may be earned. Write: Dr. Phil Peek, Department of Anthropology, Drew University, Madison, NJ 07940-4036; (201) 408-3013/3383.

Picuris Pueblo in the Sangre de Cristo Mountains, New Mexico, is the focus of an ethnographic field school, July 25 through August 15. In addition to instruction on southwest cultures and in field methods, students will live with Pueblo families and participate in village life, including pottery making, adobe construction, and feast day. Write: Dr. Diane Z. Wilhelm, Middlesex County College, 155 Mill Road, Box 3050, Edison, NJ 08818-3050; or call (908) 548-6000 ext. 3099.

The Yucatec Maya Summer Institute offers an intensive course in the Yucatec Maya language (June 10-July 19) that includes all or part of the following: classroom instruction, a hieroglyphics workshop, and field study in Yucatan, Mexico. Deadline for application is May 3. Write: Sharon S. Mújica, the Yucatec Maya Summer Institute, Duke-UNC Program in Latin American Studies, 223 E. Franklin St., CB 3205, Chapel Hill, NC 27599, (919) 962-2414, FAX (919) 962-0398, Email: mujica.ham@mhs.unc.edu.

Northwestern University's Ethnographic Field School (June 19 through August 12) is an opportunity to learn about the Navajo or Hispanic cultures of New Mexico and Arizona by designing independent research projects of the student's own choice. Write or call: Professor Oswald Werner, Department of Anthropology, Northwestern University, Evanston, IL 60208; (708) 491-5402 or (708) 328-4012, evenings.

Human Origins and Prehistory in Kenya: The Koobi Fora Field School (June 4 to July 15; July 21 to August 31), offered by Harvard University Summer School and the National Museums of Kenya,

introduces the wealth of paleoanthropological evidence at Koobi Fora and field methods in early human research. Write or call: Dr. Harry V. Merrick, Koobi Fora Field School, Harvard Summer School, 51 Brattle Street, Cambridge, MA 02138-3722; (203) 481-0674 or (617) 495-2921.

Salt Center for Documentary Field Studies sponsors research on Maine life and Maine people. For example, participants in the past have documented tradition and change in Maine among American Indians, fishermen, store keepers, mill workers, farmers, and artisans. Students choose their own projects based on their background and experience, and can receive 12 credits though the University of Maine. There is also an opportunity for students to have their research published by the Salt Center through the photography and writing program (June 10 through August 2). Write Salt Center for Documentary Field Studies, 19 Pine Street, P.O. Box 4077, Portland, ME 04101; or call (207) 761-0660.

Jefferson Patterson Park and Museum Public Archaeology Program focuses on 17th century colonial sites at the Park. Excavations will take place from May 22 through July 18; advanced registration required. No previous experience required. Contact Kirsti Uunila at (410) 586-8555 or Ed Chaney at (410) 586-8554, or write: Jefferson Patterson Park and Museum, 10515 Mackall Rd., St. Leonard, MD 20685.

Smithsonian Study Tours and Seminars is offering several American Indian culture tours. Write: Smithsonian Study Tours and Seminars, 1100 Jefferson Dr., S.W., MRC 702, Washington, DC 20560.

Discovery Passages offers tours of Native America, with a focus this year on the Southwest and the Plains. Write: Discovery Passages, 1161 Elk Trail, Box 630, Prescott, AZ 86303; (520) 717-0519.

DOING ARCHAEOLOGY: MAKING DREAMS COME TRUE

by Bonnie Christensen

One evening in the archaeology lab on the campus of the University of Wisconsin-La Crosse, a group of teachers listen to an introduction on identifying and reporting new archaeological sites, but the intense face of a high school student stands out. The guest of one of the precollege teachers attending the "Archaeology for Teachers" course, Ryan has a life-long dream--to become an archaeologist. His excitement shows as he enthusiastically asks questions of the archaeologist, who identifies and describes the projectile points and artifacts Ryan and others have brought to the class.

For Ryan, that evening sorting through his treasured collection of arrowheads gleaned from the fields of his family's farm, will change and challenge the rest of his life. Since then, Ryan has graduated from high school, is pursuing a college degree in archaeology, and is employed in the summer with the archaeological field crew at the University.

Not all stories that have roots in the Mississippi Valley Archaeology Center's (MVAC) Archaeology in Education Program are as dramatic as Ryan's. But, turning young students and their teachers on

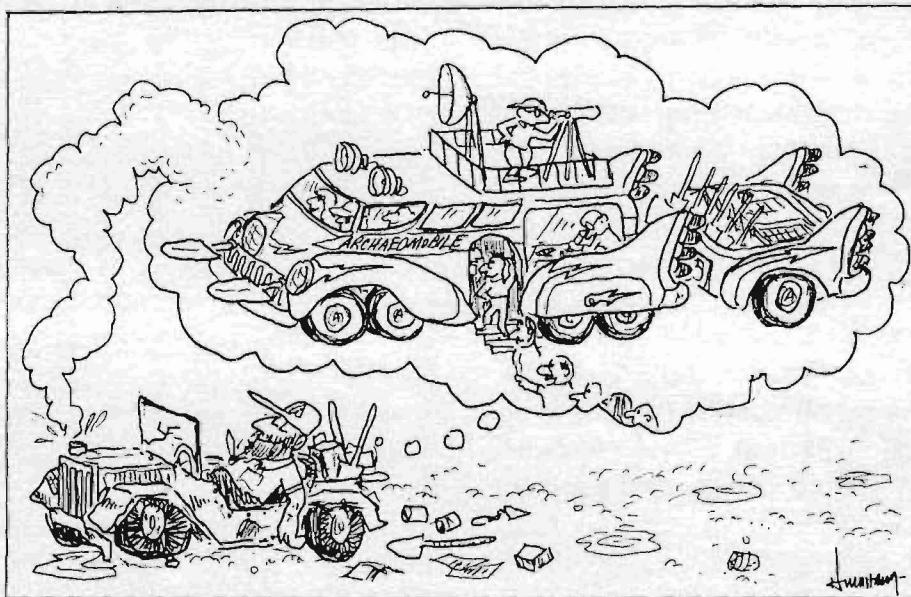
to learning about archaeology, cultivating and nurturing an interest in the science of archaeology and the history of the area's past people, and developing an awareness of and the desire to preserve cultural resources underscore MVAC's unique educational outreach mission and program.

Mississippi Valley Archaeology Center

Mississippi Valley Archaeology Center, a private non-profit organization located at the University of Wisconsin-La Crosse, conducts research on the upper Mississippi River region and educates the public about the science of archaeology and the early people of the region. In addition to its reputation for high standards in archaeological research, MVAC now offers a variety of ways for the public to become involved in archaeology. These include short lectures, numerous course offerings, summer camps for youth of all ages (kindergarten through high school), family events, laboratory opportunities, artifact identification days, field trips, excavation experience in field schools, and participation in actual archaeological research alongside professional archaeologists.

MVAC's Archaeology in Education Program

In 1990 MVAC began a concentrated effort towards archaeology education for precollege



teachers and students and, at that time, created an Archaeology in Education Program. Initially, offering speakers for classroom presentations and civic groups, the program included a collection of books and audio visual materials that teachers and the general public could access. Bringing together that assemblage of materials illustrated just how limited, outdated, and/or scientifically inaccurate much of the area's existing resource base was, as offered by area libraries and school media resource centers.

Today the Archaeology in Education Program offers various courses, information booths at conferences around the state, in-service workshops, field trips and lectures through which teachers are introduced to the science of archaeology and the pre-European and post-Contact history of the area. An "Archaeology for Teachers" course is offered for undergraduate or graduate credit. Many of MVAC's other offerings (workshops and field trips) provide clock hours that can be used by teachers towards state relicensing. Field schools and laboratory classes afford the ultimate hands-on opportunity for teachers to participate in actual scientific research and at the same time offer concepts they can use to introduce their students to all curricula areas using archaeology as a thematic focus.

MVAC's goal for precollege educators is not just to enlighten them about archaeology but to have instructors implement lessons on archaeology in their classroom year after year. To accomplish this goal, the Center believes that training teachers and turning them on to archaeology is not enough. It is imperative to support instructors once they return to the classroom. The Archaeology in Education program offers a variety of support services including two Wisconsin-licensed precollege instructors with extensive training in archaeology, resource materials, presentations, and a newsletter. The staff is available to help teachers find resources, answer content questions and provide whatever support instructors need to implement archaeology in their classroom.

Resource materials for use in the classroom include an extensive array of: 1) resource boxes that contain a variety of materials---books, videos, bulletin boards; 2) book boxes of various types that provide multiple copies of a single book title along with supporting materials; and 3) activity boxes that contain all the materials for an instructor to conduct an exciting hands-on activity session in the classroom. Materials are not all specifically based on archaeology and topics are as diverse as: Native American Art and Music, The Fur Trade Era, Rock Art, and Native American Folklore. With this assortment, teachers can put up a bulletin board, conduct a lesson or a complete unit, or create a learning center. Students can touch a traditional wooden flute or recovered artifacts, wear an authentic tinkle-cone or jingle dress, grind corn using a mano and metate, and in dozens of other ways explore how various people lived, adapted to their past environments, and continue today to preserve many of their traditions. Materials are loaned for a fee for a specified period of time; these materials are often booked months, even semesters in advance.

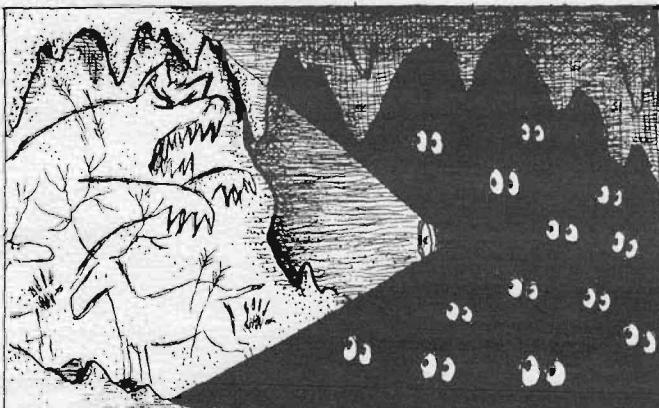
The Archaeology in Education Program provides classroom presentations ranging from large group lecture/slide shows to small group hands-on activities. Several presentations are available for teachers to choose from, or activities can be planned to fit individual needs. There are also lab tours, field trips to archaeological sites or excavations, and opportunities for students to participate in specially scheduled archaeological excavations and laboratory activities.

The newsletter, distributed four times throughout the school year, includes content information, lesson plans (usually designed by instructors), upcoming events, book reviews, information on sites to visit, and columns recognizing instructors for their participation in archaeology.

Making Dreams Come True

For many folks of all ages, MVAC's educational program offerings broaden their knowledge and

interest not only in archaeology, but also in many other inter-related fields. For a group of twenty squirming third through fifth grade students, flashlights in hand, huddled under a low ceiling of the dark reaches of a damp cave observing and learning about pre-European rock art panels, it is hard to determine which one, if any of them, will



grow up to be an archaeologist, a museum curator, a geoarchaeologist, a photographer, a historian, a cartographer or a technical illustrator. What is certain is the enthusiasm of these selected youngsters, part of a pilot spiral-curriculum project at La Crosse's North Woods Elementary School, who returned to their classrooms to report and to teach their fellow classmates about their archaeology experiences.

For a group of fourth graders, from La Crosse's Southern Bluffs Elementary, their experiences included walking plowed fields to search for cultural artifacts left from not only pre-European occupants but also from the small Mormon community that inhabited the coulee over a century ago. Besides contributing information to a current research project, the experience resulted in an exhibit in their school's media center and knowledge and memories that will last for their lifetimes. Similarly, almost twenty youngsters turned out on a Saturday morning to participate in an archaeological survey of a city park to determine whether or not valuable archaeological resources would be jeopardized by the building of a playground. Their supervised survey concluded that the playground could be safely built and at the same time gave these youngsters hands-on insight and exposure to the

archaeological process. The experience also gave them a notable distinction and pride in the development of their community.

For one retired high school teacher, Don, a lifelong dream of becoming involved in archaeology has resulted in his voluntary participation in successive summer field schools. There, Don inspires other teachers and continues to mentor to the high school students. A group of at-risk middle and high school students from around the region will long remember their week-long participation in an excavation at the site of an early fur-trade post (Perrot State Park, Trempealeau, WI) and will remember Don's guiding hand as they carefully shovel tested for the first time. Another high school teacher, Bruce, has completely re-designed his art curriculum to include projects inspired by his archaeological experiences. Still another teacher, Le Vern, who once had only a fascination in archaeology, now enjoys giving flintknapping demonstrations throughout the area and is of tremendous value to the state's regional archaeologist, having located and documented twenty-one previously unrecorded sites just within the past year. A former housewife with college-aged children of her own, Kathleen beams with joy over her recently completed undergraduate degree in archaeology from the University of Wisconsin-La Crosse and her part-time job at Mississippi Valley Archaeology Center's laboratory, where she helps supervise undergraduate students and catalogs and curates artifacts. "Every morning, I get up and say to myself, I'm living a dream," Kathleen tells visitors to the lab.

For Ryan, Don, Bruce, Le Vern, and Kathleen and for, indeed, thousands of people throughout western Wisconsin, eastern Minnesota and northeast Iowa, MVAC's Archaeology in Education Program has offered far more than satisfaction for a short-lived whim. For many, it has changed their lives. Because of the program's focus on educators and youth, even if the program ended today, its effects would continue to impact irreplaceable cultural resources, attitudes toward preservation, and without question, the shaping of public awareness and policy for years to come.

Fortunately, with respect to the future of the program, there is no intention of ending any time soon and, in fact, over the years thoughtful and intelligent growth has been conservatively approached and implemented as funding has increased. A recent National Endowment for the Humanities matching grant is being used to encourage contributions that will increase an endowment fund that partially supports the center's public education program. To use an archaeological phrase, MVAC believes that its public education efforts have just "skimmed the surface." Future dreams and plans include the beginnings of a model statewide network to serve archaeology education throughout the region. With enough funding and human resources, a mobile van housing a mini museum and archaeology classroom would better service rural areas; an in-laboratory classroom; an internet link; an on-campus, hands-on "model" excavation and much more could be done.

When Dr. James P. Gallagher, founder and executive director of the MVAC organization, arrived in La Crosse in 1977, virtually no formal archaeological research had been done in the area and skeptics scoffed at its importance. From a staff of one with an obsolete, donated computer to a staff of ten archaeologists, two educators and seasonal crews that can add an additional twenty to the staff, MVAC has indeed proven in many ways that for many, dreams can come true. The University of Wisconsin- La Crosse is now included in the limited number of universities in the nation that offer an undergraduate program in archaeology, and MVAC's Archaeology in Education Program is unique in its specific focus on involving and providing continual support to teachers and precollege students.

Starting Your Own Archaeology Education Program

The beginnings of MVAC'S Archaeology in Education Program in 1990 were the result of a desire to create more effective ways to work with the precollege audience that the Center was often asked to address. We created hands-on activities

that actively involved students in our presentations. MVAC found that classrooms were not always prepared for the presentations, so a library of books and teacher guides was gathered for instructors to use with their students before and after MVAC's presentations. Teachers, however, found visiting the library inconvenient and researching references time-consuming. We, therefore, combined existing materials and purchased and formatted complementary resources to create our first resource boxes to circulate throughout the schools.

Teachers wanted more background information and MVAC created the "Archaeology for Teachers Class." MVAC's "Archaeology Field School for Teachers" was introduced because teachers wanted to participate in field excavations but also wanted credit for relicensing and to help them move up on their pay scales. Because teachers requested information on interrelated topics and wanted activities that were not as time consuming as extended courses, MVAC's series of workshops was implemented.

Looking back, the small changes and additions to MVAC's Archaeology in Education Program have taken the organization a greater distance and in different directions than originally envisioned in 1990. Central to the growth, however, has always been our desire to listen to the needs of both archaeologists and the precollege instructors that MVAC works with, and our wish to make the program mutually beneficial. Just as important are MVAC's long term commitment to teachers and to the dual training of MVAC's educational staff. For those organizations just beginning to design or implement programs of their own, MVAC suggests endeavors that can be realistically accomplished even though, at this time, they might seem small or insignificant. Mississippi Valley Archaeology Center's journey is far from over and the future growth of the educational outreach program will continue to come from those small, seemingly insignificant actions--each individual phone call, each presentation, each report or meeting.

(continued on next page)

If any educator desires to become involved in archaeology, a great way to get started is by contacting the Society for American Archaeology (SAA), and finding out if your state has an Educational Network Coordinator, who can provide information on what educational offerings are available in your state. The SAA's Public Education Committee has available a variety of materials to assist instructors in bringing archaeology into their classroom. SAA offers a Newsletter for instructors three times throughout the school year (\$10), a sampler of lessons on archaeology, and a bibliography of materials on archaeology. For more information on any of these materials, contact: Brighid Brady-de Lambert at (202) 789-8200. For the name of the SAA Educational Network Coordinator in your state, contact Beverly Mitchum at (412) 527-5585.

For more information about Mississippi Valley Archaeology Center and its programs, contact Bonnie Christensen, Director of Public Education, Mississippi Valley Archaeology Center, University of Wisconsin-La Crosse, 1725 State Street, La Crosse, Wisconsin 54601, (608) 785-8454.

Bonnie L. Christensen is Director of Public Education, Mississippi Valley Archaeology Center.

NEW RESOURCE

Archaeology in the Classroom: A Resource Guide for Teachers and Parents describes a wide range of educational materials and resources for introducing children, from kindergarten through high school, to archaeology. This volume is organized into three parts: General Resources (e.g. books, films, magazines, computer games); Resources by Subject Area (e.g. the Americas, Greece, Rome, Africa, Near East); and Supplementary Bibliography. Indexes in the back of the book organize resources by location, grade level, culture, and specialized topics. Lastly, the guide, under Supporting Materials, provides additional useful information such as internet resources, a bibliography for parents and teachers, lists of Society for American Archaeology Education Coordinators, state historic preservation officers and state archaeologists, and affiliated institutions and related organizations. The cost of the publication is \$9 for AIA member, \$10.50 for non-member, plus \$4 for shipping and handling and 50 cents for each additional copy. Write: Kendall-Hunt Publishing Co., Order Dept., 4050 Westmark Dr., Dubuque, IA 52002; (800) 228-0810.



**SMITHSONIAN INSTITUTION
ANTHROPOLOGY OUTREACH &
PUBLIC INFORMATION
NHB 363 MRC 112
WASHINGTON, DC 20560**

**BULK RATE
POSTAGE & FEES PAID
SMITHSONIAN INSTITUTION
G-94**

**OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300**

ADDRESS CORRECTION REQUESTED

AnthroNotes offers in-depth articles on current anthropological research, teaching activities, reviews of new resources, and an annual article on summer fieldwork opportunities. *AnthroNotes*, originally part of the George Washington University/Smithsonian Institution Anthropology for Teachers Program funded by the National Science Foundation, is published free-of-charge, three times a year (fall, winter, and spring).

AnthroNotes has a three part mission:

- 1) to more widely disseminate original, recent research in anthropology in order to help readers stay current in the field;
- 2) to help those teaching anthropology utilize new materials, approaches, and community resources, as well as integrate anthropology into a wide variety of curriculum subjects; and
- 3) to create a national network of anthropologists, archaeologists, teachers, museum and other professionals interested in the wider dissemination of anthropology, particularly in schools.

To be added to the mailing list, write: Anthropology Outreach Office, NHB 363 MRC 112, Smithsonian Institution, Washington, DC 20560. This newsletter with its cartoons may be reproduced and distributed free-of-charge by classroom teachers for educational purposes. *AnthroNotes* is now available on America Online.

***AnthroNotes* Staff:** P. Ann Kaupp, Ruth O. Selig, Alison S. Brooks, JoAnne Lanouette, Marilyn R. London, editors; Robert L. Humphrey, artist. Illustrations, Robert L. Humphrey, copyright 1996.



Have you moved recently? Please don't forget to notify *AnthroNotes* editors! If you have not notified us or your forwarding order has expired, the issue is returned to us marked "Forwarding Order Expired" or the Post Office returns a copy of the back page, discarding the rest of the issue. We have to pay for the initial mailing, pay for the return, and then pay to mail you another copy! To keep our expenses down, we will no longer automatically send a second copy of the issue to you. Please help by sending your change of address as soon as possible.

