



# ARIZONA RIPARIAN COUNCIL

ARIZONA RIPARIAN COUNCIL NEWSLETTER

VOLUME 2, NUMBER 1

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## Comments on Chuck Hunter's "Commentary on Revegetation"

*by Stu Bengson*

Having read Mr. Hunter's commentary on the "sad state of affairs for revegetation," I feel compelled to respond. First, I will agree with some of Mr. Hunter's statements. I agree that today's revegetation is probably as much, if not more, art than science. It requires a certain knack to be able to successfully recreate an ecosystem. Not only do you have to understand the existing environment and how it will interact with an ecosystem, but also what kind of an ecosystem it will be to sustain itself in a given environment. I also agree that there has been a tremendous increase in revegetation work recently, and that this has not always been successful. I further agree with Mr. Hunter when he advises more experimentation and research into revegetation techniques.

I must, however, disagree with most of what Mr. Hunter alludes to in his commentary. I've been directly involved in revegetation here in the Southwest for nearly two decades now and I've seen and experienced a lot of what Mr. Hunter speaks of. Unfortunately, he speaks of revegetation from a rather limited perspective. First, he looks at revegetation strictly from a "native plants only" point of view; and secondly, he is naturally more concerned with riparian ecosystems. Needless to say, Mr. Hunter demonstrates a misunderstanding of, if not a total lack of knowledge of, a "holistic" approach to revegetation and ecosystem rehabilitation. This is not meant to demean Mr. Hunter, but rather, I mean to constructively correct some of his misconceptions.

To begin with, as I stated earlier, it probably requires at least as much skill and "art" to rehabilitate an ecosystem as it does "science." The "science" of ecosystem rehabilitation is new and in its infancy yet. This is especially true in arid environments where ecosystems are far more diverse and complex. Here, a "holistic" approach to ecosystem rehabilitation becomes even more critical. This requires a great deal of understanding of, and attention to, all the complex interacting facets of the ecosystem. An ecosystem functioning as a "whole"—not just selected aspects (i.e., hydrologic systems, vegetative community, etc.).

Another aspect of Mr. Hunter's dilemma seems to hinge on "native species only." This may be the single most limiting factor for successful ecosystem rehabilitation. An ecosystem that has been disrupted or severely disturbed is in a natural state of dis-climax. Man in his infinite wisdom recognizes this, and his penchant for immediate restoration cannot wait for natural evolutionary development. Man wants his version of the desired climax ecosystem, and he wants it now! Often we lose sight of the fact that nature has her own way of doing things and that it requires a number of factors all coming together at the same time to create a climax ecosystem. If any one factor is missing, the entire ecosystem is out of sync and unstable. Taking a disturbed environment and trying to create a wholly native ecosystem is as unnatural as a bleached blonde. You may be able to sustain it for awhile, with enough money and inputs, but eventually the black roots will begin to show through. It is far better to look first at the existing environment and use plant species that are best adapted to the site conditions as they exist—whether the plants are native or not. Then as the site is stabilized, you can manage and manipulate the vegetative community towards the desired native ecosystem. It's difficult enough to hunt grizzlies with a .22, let alone when you keep shooting yourself in the foot all the time.

I hope my comments have sparked some thoughts in some people's minds. I don't want to sound critical of the many great efforts already made in revegetation, but we must start thinking of revegetation in a holistic sense, in terms of developing stable ecosystems. Revegetation must be more than simplistic planting of desired plant material. As Mr. Hunter says, we must look at revegetation in a more "scientific" light and try to learn more about the total functioning ecosystem.

*(Editor's Note: Mr. Stuart A. Bengson is a Certified Professional Erosion Control Specialist.)*

## PRESIDENT'S REPORT

### Comments from Duncan Patten

The Third Annual Meeting of the Arizona Riparian Council was a success and I am pleased to have Andy Laurenzi and Cindy Zisner working with me on the Executive Committee. We will miss the enthusiasm of Chuck Hunter, however. The Council continues to attract people from new areas, but it remains primarily a scientific/management organization. This year we were pleased to hear from the non-point source pollution group from the Arizona Department of Environmental Quality. This adds a new perspective to our original concerns of preservation and proper management of riparian areas.

Over the past year, the Commission on the Arizona Environment completed its study of riparian issues. It has made recommendations for legislation to establish a statewide committee for review needs for future riparian-oriented legislation. We anticipate that the Riparian Council, with its wealth of expertise, will be a great help to this committee. It is becoming more obvious that increasing our knowledge base is only the first step in protecting riparian areas. We need to improve technology transfer to ensure that the decision-makers understand the reasons behind our concerns. We can all play a role in this activity.

We all must remember that the Arizona Riparian Council started as a grassroots organization. None of us have a great deal of time to give to the organization, but if we all chip in, the Council can take another giant step toward wider state recognition this next year.

## COMMITTEE REPORTS

### Land Use Committee

*Bruce Roundy, Chair*

The Land Use Committee distributed and collected a questionnaire on riparian management concerns and approaches. This questionnaire was responded to by over 30 different land management offices. The Committee summarized the responses to the questionnaire and distributed the summary to the respondents to encourage communication among land managers.

One important concern that appeared in many responses was the need for information on revegetation techniques for riparian areas. The Land Committee plans to work with the Protection/Enhancement Committee to develop a publication on revegetation guidelines for riparian areas.

### Education Committee

*Tanna Thornburg, Chair*

The Education Committee has concentrated its efforts in developing a training workshop in riparian systems for Arizona resource professionals (see article on page 8). Contact Richard Ockenfels at the Game & Fish Department for details.

Also, the 3rd Annual Riparian Natural History Workshop for Teachers has been scheduled for May 6-7 at Red Rock State Park near Sedona. The teacher workshop is co-sponsored with the Arizona Association for Learning in and about the Environment (A.A.L.E.), the state environmental education organization. The workshop is geared specifically for teachers to learn more about riparian systems, why they are important, and how to take those concepts back into the classroom. The instructors who participate in this workshop are Council members who feel this audience is an important one to reach concerning riparian issues.

The newsletter for the Council will be getting a new editor, Ron Smith. Ron recently retired from the Arizona Game & Fish Department and decided the Council was a good place to invest some of his new-found time and energies. Help us welcome Ron by promptly supplying him with articles and information when he calls.

The first Council-sponsored fact sheet on riparian information has been completed and is available for distribution. Contact me if you would like a copy. I am looking for assistance in developing the next few fact sheets; the topics are wildlife and causes of loss of riparian areas. Please call me if you would like to help or can provide needed information.

### Classification and Inventory Committee

*Bill Bayham, Chair*

The Classification and Inventory Committee has been working with land managing agencies to encourage the adoption of a central definition and classification system for Arizona's riparian systems. A Riparian Classification Coordinating Committee has been created among the main agencies involved to iron out differences and come to consensus on the common points. Despite some differences, agencies' policies and classification systems have a lot of similar components. The committee will be meeting in Safford on April 27 to look at some sites and field test the draft system. This coordinated effort is major step forward for Arizona.

## Protection and Enhancement Committee

*Kniffy Hamilton, Chair*

The Protection and Enhancement Committee has nearly completed the annotation bibliography of over 150 publications that deal with riparian issues. In the next few months, the last annotations should be finalized and the review committee should finish its changes. It is hoped that the annotated bibliography will be available this fall (possibly at the Council's 4th Annual Meeting).

## Water Resources Committee

*Marty Jakle, Chair*

On March 29, 1989, the Council received a response from the Arizona Department of Water Resources concerning our efforts to expedite the processing of applications for in-stream flow appropriations. The DWR stated that the priority for processing these applications has been elevated.

On March 17, the DWR issued the third permit in Arizona for instream flow appropriations related to recreation and wildlife purposes to the Bureau of Land Management for Aravaipa Creek.

The DWR will soon issue a second draft of a report concerning methods for evaluating historic streamflow. Following a comment period, the DWR will issue a draft of comprehensive guidelines concerning all aspects of processing applications. Ultimately, these guidelines will be promulgated as official rules. The Water Resources Committee will continue to work with the DWR on this issue.

*(Continued on Page 5)*

## ARIZONA RIPARIAN COUNCIL MINUTES

### Minutes of the Third Annual Meeting

The Arizona Riparian Council held its Third Annual Meeting at the Francisco Grande in Casa Grande, Arizona on December 2-3, 1988. Total registration was 142. Some people were unable to attend due to illness. There were some new faces among the attendees, but most were previous conference participants. Unfortunately, our student attendance has dropped from 20% at our first meeting to only 5% at the third. This may have been due to timing of the meeting near finals time or we are just not reaching the student population. If we're not reaching the students, we would appreciate some suggestions on how to do so.

Presentations by the invited speakers were very informative and we appreciate them all for attending our meeting.

During the Business Meeting, the Constitution/Bylaws changes were voted upon and passed. The subject of dues for the Council membership was brought up. Since its inception, the Council has been relying on the Center for Environmental Studies and donations to accomplish its outreach efforts. It was felt that a dues structure should be implemented to help offset the costs of printing and mailing of the newsletter and other mailings. Dues were voted on from a selection of 1) no dues, 2) \$5/year, 3) \$5/year for students; \$10/year for professionals; and 4) \$10/year. Item #2 was voted in—the annual membership for the Arizona Riparian Council is now \$5/year.

Secret ballot voting for officers occurred throughout the first day of the meeting and the new officers were announced at the evening barbecue. Duncan Patten will remain as President, Andy Laurenzi was elected Vice President, and Cindy D. Zisner was elected Secretary/Treasurer.

At the Business Meeting, the Council voted to endorse the positions of the Commission on the Arizona Environment regarding pertinent legislative efforts on stream and riparian issues.

The Chairs of the Standing Committees presented reports of their progress following the invited speakers and then the respective committees met with their members. Following the committee meetings, an informal get-together and barbecue were held by the pool and although it was a little chilly, a good time was had by all.

Contributed papers were presented Saturday morning and they were all interesting and informative. Thank you all for attending and presenting your information. The meeting was adjourned after the contributed papers were completed.

### Treasurer's Report

Balance on 1 January 1988	\$2,235.48
Administrative costs to the Center for Environmental Studies	(\$1,389.74)
Donation	\$10.00
Subtotal	\$855.74
Pre-registration	\$2,309.00
Registration at meeting	\$1,070.00
Dues received at meeting	\$15.00
Subtotal	\$4,249.74
1988 Annual Meeting	(\$2,111.70)
Refunds	(\$45.00)
Administrative costs to the Center for Environmental Studies	(\$1,153.59)
Current Balance	\$939.45

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## A RIPARIAN EXPERIENCE: CANOEING THE VERDE

by Alicia Bristow

The Verde River, once home to a Pueblo culture, the Sinaguas, stretched before the group in slow movement. The river, running at 43 cfs, was at its lowest flow with water being diverted early for irrigation.

Under White Bridge, canoes awaited the curious group who anticipated a day of learning about riparian resources as they canoed down the river. The destination was Beasley's Flat, 9 1/2 miles down river. The day was sunny and aside from the low level of water and the threat of head winds which had set in in the last 24 hours, planners were optimistic.

Two canoe trips were scheduled for March 24th and 25th to provide legislators with the outdoor riparian experience. Thirteen canoed on Friday and 21 on Saturday. At the helm was Alicia Bristow, Executive Director of the Commission on the Arizona Environment, trip coordinator, and John Parsons, "man of the river", and a member of the Arizona Outdoor Recreation Coordinating Commission of State Parks.

Senators John Hays, Jerry Gillespie, and Representatives Bill Mundell, Susan Gerard, Karan English, and Phil Gagle, CEO of the Arizona Rocks Products Association, Mayor Bob Barker of Camp Verde and other guests participated. With the assistance of the Arizona Game & Fish Department, Arizona State Parks, the Prescott National Forest, Vince Van Horn's "Come Hell or High Waters" donated canoes, and volunteer paddlers from the Northern Arizona Paddlers Club, the group readied for the launch.

Dressed in outdoor garb which varied from uniforms to Banana Republic style and everything in between, the motley crew equipped with binoculars, cameras, hats and sunscreen launched one by one after special instructions. On the second

day, two Comanche kayaks had been added. Adventurous, Alicia Bristow and John Hays, Jr. volunteered to man the kayaks. They looked like the rag tag crew of the Galactic.

With no initial problems the group set off to enjoy the experience of a serene environment and the life sounds of the river. Sounds of grunting and heave-ho could be heard as canoes and passengers pushed through the shallow rocky areas. All would agree when it was over that whatever the hurdles, the trip was well worth it.



Four scheduled stops provided short presentations on the river's riparian habitat, wildlife, water issues, access concerns, and proposed plans for recreational development. Participants said they learned the following key points:

- If eagles abort their nests, they will likely not use the same nest site, and their nesting areas are limited in Arizona
- The Verde River region was once a marsh land
- The Verde River is one of the last perennial free flowing rivers in Arizona.

- Only 5% of our original natural riparian resources exist in Arizona.

- The Verde supports many species of wildlife that are on the endangered species list

- The Verde River is rich in mature cottonwoods, ash, willows and sycamore trees

- The region has a state park, a national monument, and a wild and scenic corridor designation

- Water transfers or use of total allocations could destroy the riparian resources

- Sand and gravel operations have impacted the area

Not all of the trip was serious, boys will be boys, and girls will be girls. When Senator Hays or Senator Gillespie teamed up with Rich Stephenson from the Game and Fish Department, they experienced outdoor power which generated into canoe "ramming speed". And, not everyone stayed dry. Away from the formal and stiff offices everyone felt playful and splashed fellow boaters as they competed for the lead. There was even discussion on whether the river was a good opportunity to conduct a legislative canoe race similar to the annual legislative basketball event.

Thank goodness our Commissioner, Scott Burge served in the special forces, SEALS, because when helping Representative Karan English through the rough spots he usually ended up emerged to the waist. Observers agreed, he couldn't have made it without his Rambo training.

The group saw Canadian geese, black hawks, a variety of water fowl, blue heron and their rookery (a nursery), many fish and even bald eagles.

The Commission sponsored menu was selected and served by John Parsons and helpers. The building of camaraderie reflected in lunch as everyone hungrily pitched into preparing the food. And, it was rated a four star lunch by all!

As the trip wound down, everyone's exhilaration had turned to quiet individual triumph. They had canoed 9 1/2 miles despite the low water level. Everyone felt a sense of accomplishment in addition to being physically tired. John Parsons, on behalf of the group on Saturday, presented Alicia with a broken wooden paddle signed by participants as a souvenir.

The new visitors who shared in the experience gained knowledge about riparian resources, and new lines of communication were created between people responsible for the care and protection of this region and those who are on the threshold of understanding the value of streams and riparian resources in Arizona.

Field trips like this also provided an opportunity for the local concerns to be discussed. If grades were given for an event like this, the Verde River Canoe Trip got an "A+" said legislators and other guests.

The Commission, sister agencies, and people like John Parsons are committed to educating others about riparian resources and working for better management of Arizona's valuable streams and riparian areas.

Other field trips are planned for legislators and others as long as the water levels don't get lower.

(Editor's Note: Alicia Bristow is the Executive Director of the Commission on the Arizona Environment. Despite all the efforts put into these canoe trips and other educational activities, Bill HCR 2022, that would create a streams and riparian legislative committee to determine the management of our riparian resources, is still sitting in the Senate Committee on Health, Welfare, Aging, and Environment chaired by Senator Hays. If it is not heard, the bill will die and another year will go by without legislative action regarding this important issue.

Streams and riparian areas are a popular topic with the public, though, as evidenced by the front page article by Fred Smith in the April 17 issue of the Arizona Republic about a subsequent canoe trip in which Representative Debbie McCune and Senator Jamie Sossaman participated. The article's title read "Verde trips aim to win allies for imperiled river." The article highlights the need for protection and wise planning for the use of our state's remaining riparian resources.)

## Fish & Wildlife Service to work with the Army Corps of Engineers on projects affecting wetlands

The Army Corps of Engineers and the Fish & Wildlife Service (FWS) signed an agreement last month to work together to limit the impact of Corps navigation and flood control projects on wetlands. FWS will advise the Corps on how the North American Waterfowl Management Plan squares with a proposed project. The Corps will then take the plan into consideration in the conception, engineering, design and construction of a project. The North American Waterfowl Management Plan is an ambitious undertaking by the United States and Canada to protect wetlands. The cooperative agreement was signed by John S. Doyle, Jr., the deputy assistant secretary of the Army for civil works, and Becky Norton Dunlop, assistant secretary of the Interior for Fish and Wildlife and Parks.

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## Policy Committee

*Andy Laurenzi, Chair*

The Policy Committee has been keeping track of several pieces of legislation currently before the state legislature this session. The Arizona Riparian Council was represented during the committee hearings on the water transfer bill. It is interesting to note that the Farm Bureau was asking for more environmental measures regarding the water transfer bill. The question was brought up whether the Council should develop a policy statement on the water transfer issue. It is felt that any position the Council takes must reflect and maintain its scientific credibility. HCR 2022, creating a Riparian Task Force, may not be heard this session with the reason given that there are too many bills still to be heard. It obviously is not a legislative priority issue at the present time.

## Bureau of Land Management Dedicates the San Pedro Riparian National Conservation Area

Dedication ceremonies for the San Pedro Riparian National Conservation Area will be held May 6th at the San Pedro House, 6 1/2 miles east of Sierra Vista just off State Highway 90. Governor Rose Mofford, members of Arizona's congressional delegation, and other dignitaries have been invited to the ceremony to formally dedicate the nation's first "Riparian National Conservation Area." The public is invited to attend.

The San Pedro Riparian National Conservation Area, one of only five national conservation areas in the country, came into being November 18, 1988 when President Reagan signed the Arizona-Idaho Conservation Act.

The land along the upper San Pedro River was acquired by BLM through a series of land exchanges because of the area's outstanding natural, cultural, and paleontological values. The 56,431-acre San Pedro Riparian National Conservation Area includes over 35 miles of the San Pedro River, representing one of the best remaining examples of a desert riparian ecosystem.

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## Arizona State Parks

### Arizona Rivers News

by Tanna Thornburg

As a result of the Arizona Rivers, Streams, & Wetlands Study that was conducted as part of the 1989 Statewide Comprehensive Outdoor Recreation Plan (SCORP), Arizona State Parks is beginning several projects that will have an impact on the state's riverine resources. All projects will involve broad-based public participation and will encourage involvement from all people and groups interested in the future of our state's riverine environment.

#### Arizona Rivers and Streams Guide

Arizona State Parks is currently developing a recreational guidebook to Arizona's rivers and streams. The guide will highlight those waterways that offer opportunities and access for recreational pursuits such as white-water canoeing, kayaking, tubing, fishing, camping, bird watching, swimming, wading and "feet-dangling." The new guidebook should be available for distribution later this summer or early fall.

#### Verde River Corridor Management Plan

The Arizona Rivers, Streams, & Wetlands Study identified the need for the State of Arizona, in cooperation with other interested parties, to implement river corridor planning on some of the state's most heavily used and critical rivers.

Because of the tremendous number of issues and activities involving the Verde River, Arizona State Parks will be initiating a rivers corridor management plan for the Verde River drainage basin, focusing on the upper segment of the Verde River from Sullivan Lake to Childs. The land ownership in this segment is varied and demands and pressures on the riverine resources are tremendous. The six-mile Verde River Greenway that State Parks manages is a good beginning for the conservation of this incredible resource, but there are many more opportunities to impact positively the management, use, and protection of the Verde River and its resources.

The corridor management plan will look at these demands, problems, and opportunities, recommend solutions and work on implementation strategies. State Parks will take the role of facilitator, coordinating an ad hoc committee, composed of representatives of all river-related uses and values. This diverse committee will be the key to determining the level of consensus on the management direction and decisions for the Verde River.

Corridor planning refers to initiatives by public and private interests to address problems and opportunities associated with a river and its riparian lands through the

development of a plan for a river. The objective is to look at a river area as a whole and to devise meaningful strategies for conservation and wise use. To be successful, this effort usually necessitates a cooperative planning process that addresses concerns held by a variety of interests including landowners, river users, management authorities, and the general public. Ultimately, the success of these efforts can be measured by the extent to which the proposed management concept can be supported by all affected parties.

#### Arizona Rivers Assessment

The Arizona Rivers Assessment is being initiated by the National Park Service Rivers Technical Assistance Program and Arizona State Parks and is intended to involve all agencies and organizations in a cooperative statewide effort. The goal for the assessment is to provide the state with a tool for making management decisions about the state's river resources. The scope of a statewide rivers assessment must be diverse and include all river-related uses representing a range of economic, natural, and recreational river use values.

The Arizona Rivers, Streams, & Wetlands Study identified the need to undertake a systematic statewide assessment of rivers, streams, and wetlands in order to identify waters possessing critical recreation and environmental values. The rationale behind the identification of critical resources is to foster a climate where integrated resource management occurs, where management has broad-based public support and is based on a clear set of priorities, and strikes a thoughtful balance between competing interests. Our river resources are the most significant resources we have in Arizona; they are also the resources most heavily in demand. A tool such as a rivers assessment will be of great benefit in deciding on the levels and types of protection and management of the state's river resources.

An assessment is an effort to determine the relative significance of a stream or wetland when compared to other similar resources. This is in contrast to an inventory which simply observes and records factual information. An assessment is a response to the need for a consistent information base for use in decision-making about river resources. An assessment involves making value judgments, so there is a clear need for an understanding of the human element.

A project of the scope planned will require the support and effort of a large number of people possessing a wide variety of skills. Broad-based public involvement is the key to a successful rivers assessment for Arizona. Staff at State Parks will be contacting agencies and organizations regarding the statewide rivers assessment effort in the near future.

## Raptors

by Gary S. Lollman

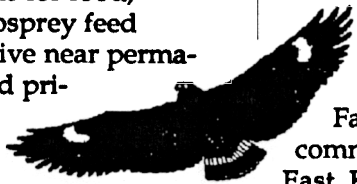
When seen soaring high on outspread wings or circling on rising thermals, raptors seem imbued with majesty and magic to us earthbound mortals. Red-tailed hawks were thought to be the messengers of gods by native Americans. In more recent times, the "chicken hawk" has been indiscriminately shot and persecuted. What does the average person know about raptors? What is their role in the environment?

Predators are not vicious, highly refined killing machines, to be feared or destroyed. Predators hunt and kill for their food, but so does every other living creature. Predators are portrayed negatively in folk tales, cartoons, stories, and the media. Scientific and factual knowledge exists today that dispels the myths and paints a true picture of the winged predator.

Eagles, osprey, falcons, hawks, and owls are all called "birds of prey," yet each is unique in filling a niche in the environment. Each has specialized needs for food, shelter, and nest sites. Bald eagles and osprey feed primarily on fish and scavenging, thus live near permanent bodies of water. Golden eagles feed primarily on large rodents, particularly jackrabbits, so are more widespread in their range. Many hawks feed primarily on rodents while the small owls and kestrels feed on insects, lizards, and small mice.

Populations of predators do not control the numbers of their prey. Predators can help control or stabilize an increase in a prey species. In most instances, the amount of prey available as food will determine the number of predators that survive in a given period of time. Many young raptors never leave the nest or survive their first year. There may not be enough prey available, disease and sickness take a toll, young are blown out of the nest, both winged and ground predators are a threat, and raccoons and other mammals eat eggs and unprotected young. Approximately fifty percent of the young fledge or leave the nest and only half of these will survive their first year. Many immature or first year raptors are inefficient in hunting prey, are shot, electrocuted, or hit by vehicles.

Raptors are at the top of their food web allowing us to monitor the general health of our environment by sampling and testing of individual raptors. Levels of environmental pesticides can be measured in raptors. The decline of peregrine falcons and osprey during the 1960s alerted us to the effects of DDT, a pesticide used to control insect populations in agricultural areas. Numbers of predators can also help us estimate prey populations and habitat loss. Aside from this, birds of prey are fascinating to observe and enjoy for their own sake. Each part of our environment, whether plant or animal, has a place and should be coveted, enjoyed, and protected.



## Falconry—Birds of Prey

by Gary S. Lollman

Hawks, eagles, and falcons have stirred the hearts of men and women since the beginning of time. Raptors have been both worshipped and persecuted, through myth, religion, and misinformation. Only in falconry have these birds been loved, respected, studied, and trained to hunt with man.

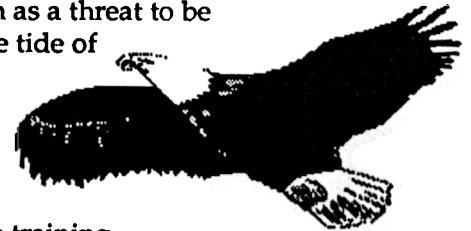
Falconry is the art and practice of training birds of prey to hunt wild quarry with the aid of a man or woman. Falconry and falconers have received public attention and this ancient sport and art has seen a rebirth in recent years. Images of kings, queens, knights, and jousting are evoked when falconry is mentioned, yet this is an even older and ancient practice.

Information is sketchy but the first hunting birds were used to catch food for us earth bound mortals about 2000 B.C., almost 4000 years ago. The nomads of central Asia began training birds of prey; golden eagles were trained and flown at deer and wolves from the back of a horse. Other raptors such as the goshawk were flown at a variety of gamebirds, waterfowl, and rabbits.

Falconry began to spread with the travel, trade, and commerce between people and cultures; into the Middle East, Korea, and the Islands of Japan. The crusade years, when European countries were waging war in the Middle East, brought falconry to the attention of Europe's nobility. The purpose of falconry was also changing.

Bird and man once intent on bringing back food were beginning to perform for the ruling class. Professional falconers were developing who kept, trained, and managed large numbers of hawks and falcons for the enjoyment of lords and nobles who owned the land where birds could be flown at wild quarry.

Falconry developed with people living at a time when there were no firearms or modern equipment for hunting or farming; this slowed the spread of falconry to America. The early colonizers of the New World had firearms and farm implements. The wilderness of this new land was something feared, which had to be conquered by gun and plow. Predators such as cougars, bobcats, wolves, hawks, and eagles were seen as a threat to be eliminated before the tide of this agriculturally oriented people. Fears and prejudices against winged predators did little to foster the training and development of falconry in the New World. Even today, the "chicken hawk" is shot by many misinformed, even though all birds of prey are protected by federal and state laws.



(Continued on page 9)



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## The Arizona Riparian Council Begins A New Educational Venture Riparian Systems Workshop: Ecology of a mid-elevation stream

The Education Committee, as part of its educational and fund-raising goals for 1989, is planning a professional training workshop in riparian systems along Oak Creek during the first or second week of August 1989.

The session would start on a Monday night, continue all day Tuesday, and conclude at noon on Wednesday. The workshop would include the following: 1) the general ecology of the area, 2) specifics of a mid-elevation riparian ecosystem, 3) geology/hydrology, 4) the flora component, 5) the faunal components (aquatic and terrestrial), and 6) impacts and management of riparian systems. The workshop, proposed for Red Rock State Park, would be oriented for professional-level agency or consulting personnel with some resource background, but would not exclude public interest groups. A maximum of thirty (30) participants can be accommodated.

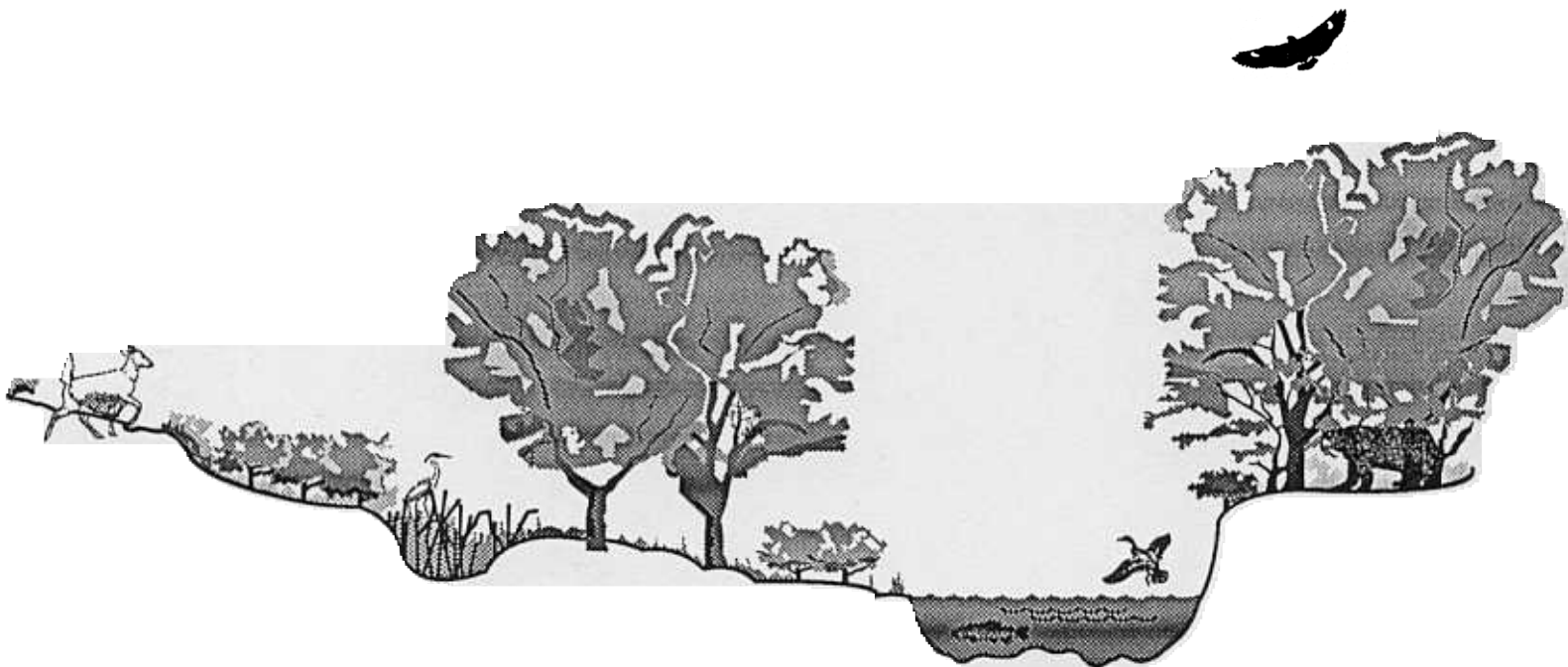
Red Rock State Park, located southwest of Sedona, encompasses 286 acres of scenic red rock country and protects over 1.3 miles of a healthy mid-elevation riparian ecosystem along Oak Creek. The state park is not open to the public yet and is just now being developed. This is an excellent opportunity to see what an undisturbed riparian area along Oak Creek looks like.

The workshop will be a field-oriented, hands-on, rustic campout. Attendees will provide their own meals (quick ones for breakfast and lunch; dinner will be a bit more leisurely). It is expected that the majority of the participants will be camping on site (campers or tents). There are limited indoor facilities for cooking and throw down sleeping. Restrooms and showers are available.

Sedona is about 15 minutes away for those who are considering lodging in town. However, the workshop schedule will be packed morning, afternoon, and night, so eating and lodging off site will cut into some of the educational sessions.

The cost for the workshop will be \$75.00 per person, which will include all handouts, materials, travel, and equipment needed during the course.

If interested in either attending, training, or suggesting a particular aspect you would like to see covered in the workshop, please contact Richard Ockenfels, Arizona Game & Fish Department, 942-3000 or Tanna Thornburg, Arizona State Parks, 542-1996.



Falconry did come to Canada and the United States. Elitist clubs from England and Germany still existed and some of their members toured the eastern United States and gave demonstrations with trained birds. This exposure excited many and a few began to learn, grow, and develop a nucleus from which falconry today is practiced by approximately 3,500 licensed falconers in the United States. A national falconry club exists today along with state organizations.

Falconry training techniques and methods have changed little, but now there are federal and state laws concerning the capture, possession, and training of all hawks, falcons, eagles, and owls.

Modern day falconers must pass a written examination, be an apprentice for two years, and have their equipment and facilities inspected by state wildlife authorities. These regulations are restrictive, but are designed to protect the birds and help ensure their well being.

Falconers love, admire, and respect their partners. Falconry demands time, patience, and a long-term commitment but can yield a unique relationship between man and bird.

## CALENDAR OF EVENTS

\* August 1989--Training Workshop in Riparian Systems, Co-sponsored by the Arizona Riparian Council, AZ Game & Fish Dept., AZ State Parks, US Fish & Wildlife Service and others, Red Rock State Park near Sedona. For more information, contact Richard Ockenfels, 942-3000.

\* September 1989--4th Annual Meeting of the Arizona Riparian Council--White Mountains, exact date and location still to be decided.

At its annual meeting in Casa Grande in December 1988, the Arizona Riparian Council instituted an annual dues to help offset newsletter printing and mailing costs. If you wish to continue your membership with the Arizona Riparian Council and receive its quarterly newsletter, please fill out the membership application and mail it with your \$5.00 annual dues to the address listed below.

### ARIZONA RIPARIAN COUNCIL MEMBERSHIP APPLICATION

NAME \_\_\_\_\_ TELEPHONE \_\_\_\_\_

AFFILIATION \_\_\_\_\_

ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

MEMBERSHIP DUES OF \$5.00 ENCLOSED \_\_\_\_\_ DONATION \_\_\_\_\_

MAKE CHECK PAYABLE TO ARIZONA RIPARIAN COUNCIL AND SEND WITH THIS APPLICATION TO:

CENTER FOR ENVIRONMENTAL STUDIES  
ARIZONA RIPARIAN COUNCIL  
ARIZONA STATE UNIVERSITY  
TEMPE, AZ 85287-1201

The Arizona Riparian Council (ARC) was formed in 1986 as a result of increasing concern over the alarming rate of loss of the State's most threatened natural ecosystems—*riparian systems*. It is estimated that less than 10% of the State's original riparian acreage remains in a natural form. These habitats are considered Arizona's most rare and threatened natural communities.

The purpose of the ARC is to provide for the exchange and transmittal of information on the status, protection, and management of riparian systems in Arizona. For the purpose of this Council, the term "riparian" is intended to include vegetation, habitats, or ecosystems that are associated with bodies of water (streams or lakes) or are dependent on the existence of perennial, intermittent, or ephemeral surface or subsurface water drainage. To put it more simply, riparian habitats are the green ribbons of trees and shrubs growing along watercourses.

The ARC newsletter is published quarterly and is an effective medium to communicate current events, issues, and impacts that involve Arizona's riparian systems as well as detailing the happenings of the ARC. To contribute articles and information or address comments to the ARC, please send all materials to:

Tanna Thornburg, ARC Editor  
 Arizona State Parks  
 800 W. Washington, Suite 415  
 Phoenix, AZ 85007



Any person or organization interested in the management, protection, or scientific study of riparian systems, or some related phase of riparian conservation is eligible for membership upon submittal of dues to the address below. Dues are \$5.00 annually. Additional contributions are gratefully accepted.

For more information about the Arizona Riparian Council or to join, write to the return address below.

# ARIZONA RIPARIAN COUNCIL

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 Andy Laurenzi.....622-3861  
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