COYOTE CREEK RIPARIAN STATION

RipariaNews

NON-PROFIT ORG.
U.S. POSTAGE
PAID
ALVISO, CA.
PERMIT NO. 10

Newsletter of the Coyote Creek Riparian Station

P.O. Box 1027 Alviso, CA 95002 (408) 262-9204

Volume 5 April, 1990 Number 2

CCRS BIRD CENSUS SUMMARY—1989

by Grant Hoyt

In late 1988 a census of the birds associated with Coyote Creek riparian habitat and the REACH 1 Mitigation Area was initiated (see **RipariaNews,** April 1989), and since that time has been conducted on a regular basis by CCRS volunteers. The purpose of this census is to add to our knowledge of the avifauna of our research area by carefully noting all birds seen and heard on a given day including those species, such as raptors and waterfowl, that typically avoid capture in the bird-banding program. Reported here are some of the data collected during the calendar year 1989 from 32 census visits over 9 months (no censusing took place in June, July or August). Due to irregular coverage, major habitat changes, disruption in the census areas and other uncontrolled variables, we present our results here in a somewhat anecdotal and informal fashion, but in the future hope to collect and publish our data in a more controlled, scientific manner.

Scope of Census

As mentioned above, the census area is composed of two separate parts: 1) the 2-kilometer Coyote Creek REACH 2 riparian corridor running from net site 8,000 (North) to site 10,000 (South), and 2) the REACH 1 area, an 87-acre wetland parcel located northwest of the riparian portion of the creek. REACH 1 is now being revegetated and managed to attract waterbirds as part of a mitigation and habitat restoration project. Anyone who has visited the CCRS research site in recent months is certainly aware that the Santa Clara Valley Water District's flood control project has seriously impacted the lives of the many creatures, birds included, who exist in the riparian zone. Trees, willows, shrubs, weeds and grasses have been eradicated as the bulldozers and earthmovers create new levees, grade the flood plain, and even change the course of the creek as part of the long-range, worst-case-scenario flood control plan.

See related article in this issue by Alberta Anaclerio. In her interview with the construction coordinator for the Santa Clara Valley Water District, the issues surrounding the impacts and mitigation measures being implemented by the District are discussed.

Prior to the onset of this work in September of last year, censusing the creek was relatively straightforward: starting as early as possible in the morning to catch the passerines and other riparian-associated species at their most active time of day, the censuser would walk the west side of the creek, usually from south to north, recording all birds seen and heard in the habitat defined as riparian. This includes birds in the water, along the banks, in the low dense vegetation bordering the creek, and in the willows and trees along the creek. A 50-foot wide strip was defined as the distance from the creek bank up to which birds should be counted, and in most cases the true riparian habitat does indeed dwindle into weeds and low shrubs beyond 50 feet. Certain species, notably raptors and some waterfowl, were counted outside the 50-foot limit since they were known to be using the creek for roosting, foraging, etc., and it was judged a good idea to include these and other noteworthy species (e.g., Peregrine Falcon, Golden Eagle) in the census for future reference, even though their association with the riparian zone might be transitory. A thorough census of the two kilometers of riparian habitat required an average of three hours.

Coverage of the REACH 1 area has likewise been affected by the flood control project and the habitat restoration/revegetation of certain sites. During the course of the year the topography of REACH 1 underwent significant changes as new roads and levees were built, salt-marsh and other natural vegetation were planted, and water levels were lowered to accommodate the earthmoving crews. Censusers were thus faced with almost weekly surprises as they counted birds in the area. Waterbird numbers naturally decreased with the draining of the area's man-made lake, which had proven an attractive habitat for a variety of species early in the year, and the ongoing drought added to the scarcity of water in other spots.

Besides the lake, REACH 1 includes a diversity of habitats including riparian, tidal channels, mudflats, salt-

marsh, weedy fields, and salt ponds. Coverage during 1989 was accomplished by driving to various spots and counting the birds in that particular habitat, then moving to another spot, etc., and was completed in an average of two hours.

Results

A total of 143 species was recorded in the two census areas during 1989, 108 in the Coyote Creek riparian zone and 107 in the REACH 1 area. These totals are not surprising in light of the habitat diversity offered in such a relatively small area, and underscore the need for preserving these lands in the Santa Clara Valley. The census area provides year-round habitat for a number of our local breeding birds such as Great Blue Heron, American Avocet, Red-tailed Hawk, Black Phoebe, Common Yellowthroat and Song Sparrow, all of which were recorded on nearly every census visit. Migratory species like Pectoral Sandpiper, Rufous Hummingbird, and Black-throated Gray Warbler were recorded only during brief periods, stopping to refuel for their prolonged journey to and from breeding grounds. Wintering species were quite numerous, particularly in the REACH 1 area, where groups of Eared Grebes, Canvasbacks, Willets, Bonaparte's Gulls and others spent the colder months before departing in the spring. Mixed flocks of gulls, up to 10,000 on occasion, were a frequent sight, and at low tide in mid-winter the mudflats were alive with up to a dozen shorebird species.

Raptors were present on even the dullest of census outings, and an impressive list was accumulated during 1989. Red-tailed Hawks were by far the most frequently seen raptor species, followed by Turkey Vulture (not a true raptor, of course); these two were recorded on nearly every census visit throughout the year. Two other birds of prey frequently found in wetland habitat, the Northern Harrier and Black-shouldered Kite, were recorded regularly through the spring but only occasionally after May. Both species are known to breed locally but may have moved from the census area due to habitat disruption and/or a decrease in rodent populations. Accipiter hawks were seen occasionally, with Cooper's sightings outnumbering Sharpshinneds by a 5-to-1 ratio. An immature Cooper's Hawk first seen in October was observed several times over this past winter in the vicinity of the CCRS trailer. American Kestrel and Red-shouldered Hawk are relatively common in their respective habitats throughout the Bay Area, but for some reason were recorded only occasionally on this census. Perhaps the most exciting raptors to be seen were Peregrine Falcon and Golden Eagle, both of which were recorded not only over the open areas in REACH 1, but on separate occasions found roosting in cottonwood trees along the riparian corridor. Each was seen three times in 1989. Owls were not often encountered during the census, although Great Horned, Barn and Burrowing were seen and probably breed in the area.

The REACH 1 area provided a haven for a variety of waterbirds in 1989 despite the shortage of rainfall and the disruption of habitat resulting from the flood control project. Salt ponds at the periphery of the area were popular with dozens of species: Eared Grebe, Double-crested Cormorant, Common Goldeneye, Canvasback, Bufflehead, Green-winged and Cinnamon Teal and Bonaparte's Gull were among those observed regularly in winter, with occasional sightings of American White Pelican (Nov.) and Caspian Tern (Apr.&Sept.). Dabbling and diving ducks were well represented, especially from Jan. through April before the major earthmoving projects began. Besides the expected shorebird species such as Willet, American Avocet, Black-necked Stilt, Marbled Godwit, peeps, dowitchers, etc. there were regular sightings of Black-bellied and Semipalmated Plover, Killdeer, Greater and Lesser Yellowlegs, Spotted Sandpiper, Long-billed Curlew, Sanderling and even Pectoral Sandpiper (two sightings in early Oct.). The strategy for managing certain sections of REACH 1 will include maintaining higher water levels during winter months to attract ducks, and lower water levels during peak shorebird migration periods to attract waders. As the salt-marsh and weedy areas recover over the next few years the following species, all recorded in 1989, can be expected to find acceptable habitat: Marsh Wren, Common Yellowthroat, Loggerhead Shrike, American Pipit, Common Raven, Red-winged Blackbird, Savannah and Song Sparrow, and Western Meadowlark.

Although coverage of the riparian corridor along Coyote Creek was similarly hampered by disturbance from the flood control project, our observations nevertheless confirm what the bird-banding program has already shown---that bird life along the creek is lively and diverse. Some species visit only occasionally during migratory periods, some are present either as fall/winter or spring/summer residents, and some are found year-round. Not all of the birds recorded on the creek census were found flitting in the treetops or willows: Pied-billed Grebe, Green-backed and Black-crowned Night Heron, Snowy and Great Egret, Mallard, Gadwall, Ruddy Duck, Greater Yellowlegs, Spotted Sandpiper and Belted Kingfisher were all seen in or along the banks of the creek. Five swallow, two swift, four hummingbird, three woodpecker and five flycatcher species were observed. Winter Wren, Golden-crowned Kinglet, Varied Thrush, Western Tanager and Pine Siskin were some of the less common passerines recorded, along with nine warbler species: Orange-crowned, Nashville, Yellow, Yellow-rumped, Black-throated Gray, McGillivray's, Wilson's, Common Yellowthroat and Yellow-breasted Chat. Perhaps the most ubiquitous, vocal, easy-to-count bird was the Song Sparrow, which totalled 48 individuals (some of whom were fledglings) on two occasions during the spring.

Conclusions

The irregularities and inconsistencies mentioned at the outset of this article preclude the meaningful statistical analysis of bird census data for 1989 and probably 1990 as well. Certainly the data collected thus far has both interest and merit, adding significantly to our understanding of bird populations at the CCRS research site. Birds were censused

in areas where nets and traps are seldom used, and birds that typically elude the nets and traps were likewise counted. Casual information regarding vegetation, terrain, water levels and weather was recorded. New volunteers increased census coverage almost three-fold and provided much-needed consistency, and along with CCRS staff members have made suggestions for improving census techniques. Our goal is to continue the regular censusing of birds at CCRS indefinitely, collecting data in a consistent, scientific fashion, contributing information about birds and their habitat as it pertains to CCRS in general and specifically to the management of certain areas, i.e., REACH 1. New volunteers are always welcome.

Census volunteers

Roy Cameron, Ed Gustafson, Karen Hoyt, Mike Mammoser. Coordinator: Grant Hoyt. Advisor: Dick Mewaldt.

CCRS AND THE WATER DISTRICT FLOOD CONTROL PROJECT

by Alberta Anaclerio

For many of us at CCRS, it has been a painful process. As weeks turned into months we have witnessed the devastation of large sections of the riparian corridor along Coyote Creek, the repeated plowing of the ruderal fields, the appearance of levees to the east and west, and an overflow channel to the south. Many of us have questions regarding the necessity and scope of the project. In an effort to better understand, I was grateful to Dean Arroyo, Resident Construction Inspector, who agreed to let me interview him regarding Water District activities.

On Friday, April 7, I wended my way through a sunny afternoon to meet with Dean in his field office, a trailer not unlike our own, parked on the northern periphery of the project lands.

AA : Dean, many of our members, especially the volunteers who have directly witnessed the impact to the habitat over the past several months, have wondered what is being done and why it's been necessary to do it. In order to get the bigger picture and better grasp this whole dynamic, I'd like to start from the beginning with the history and process that's been involved. How did this project get started and who exactly initiated it?

DA: The Santa Clara County Water District.

AA: When did it first get set in motion?

DA: That's a good question. It probably goes back five to ten years ago when a Planning Study was initiated to better prepare for the 100 Year Flood. I'm not sure of the exact date, but as a result of a benefits assessment it was determined that flood protection was necessary. At that time, the project was also conceived of as having three phases: Reach I (The Leslie Salt Ponds), Reach II (Extending from the salt ponds to Highway 237) and Reach III (Continuing from Highway 237 to it's completion point at Montague Express way.)

AA: Why is the Water Board funding this project instead of the Army Corps of Engineers? Don't they traditionally fund and construct flood control projects?

DA: Not necessarily. The Corps does a lot of big projects while the water district does a fair share of projects also, but on a smaller scale. Apparently we were able to get funding. The Corps didn't fund the first Reach, but we were able to get it for Reach II and III.

AA: Can you explain, then, how the Water District is interacting with the Corps?

DA: I'm not exactly sure. You'd have to talk to the designer, Joe Chin for details, but, it's my understanding that they are reimbursing us for the job. They review all our plans and specifications to make sure our work falls within their guidelines, but we're doing the actual design and construction.

AA: To digress for a moment, why is there need for such extensive construction?

DA: In the benefits assessment section of the planning study, it was determined that this was the work that was necessary to establish adequate flood control measures. It was Coyote Creek that flooded Alviso and Milpitas in the 70's and again in the 80's. Through all of that the creek had remained in it's natural state. It's never been worked on.

AA: With the growing awareness for preserving the environment, why has there been destruction of such large portions of the riparian corridor?

DA: The planning study came up with five options to achieve preparedness for the 100 year flood. Basically, this was the cheapest. The reason it looks so extensive is because they wanted to save as much of the riparian corridor as possible, so they ended up having to go with what's called a modified flood plain. They have a levee running parallel to the creek on the outside with crossovers. As the water floods over the creek channel, it will run along both sides of the riparian corridor in low flow channels. As the flood level rises, these outside levees will contain the water. As it flows downstream it will come to the rock sections, which are the crossovers where, as the water recedes, it will come back into the creek. So, this was the cheapest alternative with the least amount of damage to the riparian corridor.

AA: So, from what you've told me, it sounds like if those of us who are concerned today had wanted to have any real input into this whole process, we would have had to be present at the initial meeting proposing the planning study some five or ten years ago?

DA: That's right.

AA: Are these meetings open to the public, then? And, are they announced somehow so concerned citizens can be informed?

DA: Yes. I think they are. I believe they're published through the local newspaper.

AA: Getting back to Coyote Creek itself, Dean, many

of us are wondering how much more of the creek is going to be impacted? Will the bulldozers continue to roll?

DA: Basically, everything that has to be done has already been done. The section that's being worked on now just south of the trailer in proximity to the overflow channel is the last area to be altered. With it's completion, which should be today, there will be no more disturbance of the riparian corridor.

AA: When is the target date for completion?

DA: The end of May (1990).

AA: Dean, in terms of co-operation or facilitation, what is the role of CCRS in conjunction with the Water Districts efforts?

DA: None in the construction phase.

[Ed. Note. CCRS does have a major role in monitoring the success of the riparian and wetland mitigation measures implemented by the Water District.]

AA: Well, then. I guess the last question we've all been wondering about is, when can we move the trailer onto the new pad?

DA: I'd say after the project's completion; soon after the end of May.

AA: Great! Thank you, Dean. I know this will be informative for CCRS members, and we certainly appreciate your time and willingness to co-operate with us.

OFF THE WALL - THE 1989-90 WINTER SEASON

By Bill Bousman

Do our winter residents all come in a rush with the first storms of autumn or do they come in dribs and drabs? How many of the birds that we capture are on their wintering grounds and how many are just passing through for locations to the south? Our banding data sample both the populations passing through and those that are largely resident, but the interpreta tion is difficult because it depends upon how efficient our sampling process is and the winter biology of each species. I have plotted the cumulative new captures for our wintering species, much as I did for the migrant species in the last **RiparianNews**. However, for the figures here I have combined the new capture data from the Summary Board for the years 1988 and 1989 along with the first three months of this years's data.

Most of our common winter residents seem to show one of two patterns. In **Figure 1** I show the cumulative data for the Puget Sound race of the White-crowned Sparrow. Note that the time scale extends from 1 Jul to 30 Jun to show the winter behavior. For the White- crowned Sparrow we see a few birds in mid-September and then the influx is on us. For the rest of the season the data look like an exponential rise to a fixed asymptote. This is the sort of behavior you would see if you had a fixed sized population and the speed of the rise is governed by the efficiency of the

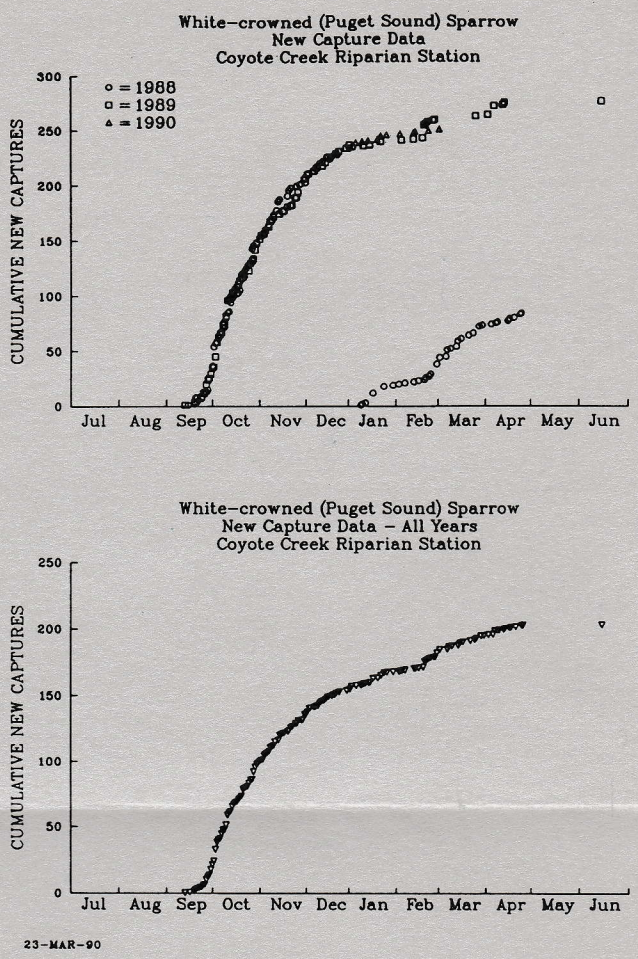
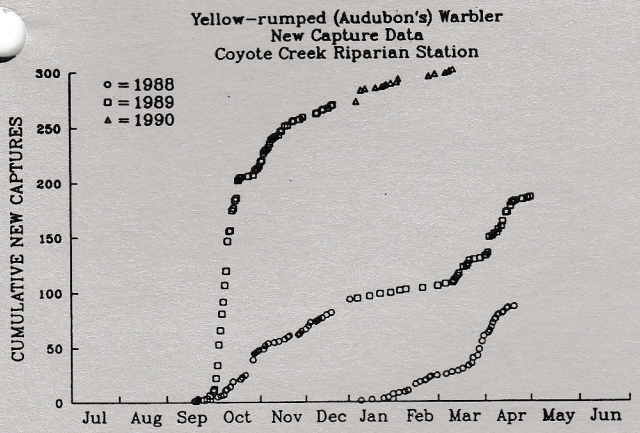


Figure 1. Cumulative new capture data for White-crowned Sparrow for 1988-90.

sampling method. And then one day at the end of April, boom, they're gone.

The other temporal behavior I observed is shown in **Figure 2** for Audubon's race of the Yellow-rumped Warbler. Here we see a very rapid rise in numbers to the end of October, much as we observed for fall and spring migrants, and then a period of growth similar to the White-crowned Sparrow up through March. Then, however, there is a noticeable spring migration for this species during April. (If you are afield during that month it seems like there are handsome males singing everywhere.) It seems clear that if we were banding only wintering birds we wouldn't see this April movement.

Common wintering species that show temporal behavior very similar to the White-crowned Sparrow include Ruby-crowned Kinglet and Fox and Golden-crowned Sparrows. The Hermit Thrush and Lincoln's Sparrow show cumulative capture rates that are more like the Yellow-



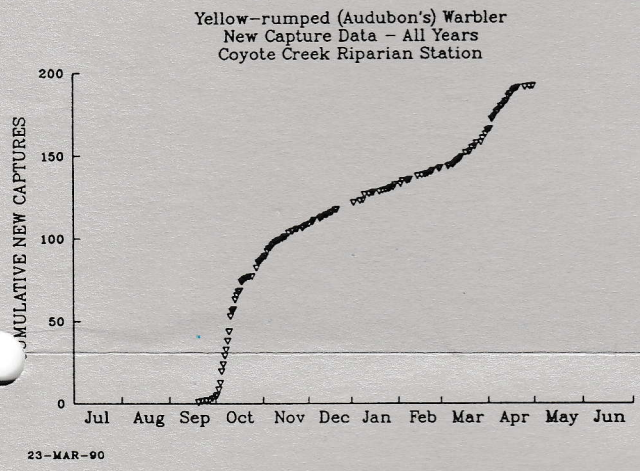


Figure 2. Cumulative new capture data forYellow-rumped Warblerfor 1988-90.

rumped Warbler.

The banding operation was active for 26 days in December and 20 days in both January and February. The first Allen's Hummingbird of the year was 17 Feb., very close to our first dates of 1988 and 1989. Two House Wrens were caught in December (the 15th and 20th) and they were re-captured on three dates in January. Past winters we have normally netted a few Winter Wrens, but this did not happen this year.

The winter of 1988-89 was a good one for Golden-crowned Kinglets with 23 captured. Only five were banded this winter and none were found after mid-December. Both the myrtle and Audubon's race of Yellow-rumped Warbler have been captured in much higher numbers this winter, but Fox and Lincoln's Sparrows have both been down from the previ ous winter. The Ruby-crowned Kinglet and Golden-crowned and White-crowned (Puget Sound) Sparrows have been found at about the same rate.

MEMBERSHIPS IN CCRS

Member	$15 annually
Senior or Student	10 annually
Family	20 annually
Supporting	30 annually
Sustaining	75 annually
Corporate	100 + annually
Life	500 single payment*
Patron	5000 single payment*

Life Membership payments and 10% of all other membership payments and general contributions go into the CCRS Endowment Fund now earning about $175 per month. CCRS is a non-profit corporation with U. S. and California tax exempt status. Five dollars from the dues of each joint CCRS-SCCBB Atlas Member goes to the Atlas program. We acknowledge Memorial contributions in **RiparianNews**. We welcome bequests, including those of real property.

*Or in 4 or 5 installments

NEW MEMBERS

We welcome 12 new members who joined us in the last three months:

George Banuelos	David L. Reinsche
Irene Beardsley	Miklos D. F. Udvardy
Gabriel Cuk	J. G. Van Stee
Larry Fradin	Suzanne Van Stee
Bobbie Handen	Dennis P. Vroman
Edwin F. Laak	Daphne Wollmann

Membership renewals are coming in very well.

Some have upgraded their membership category or made an additional contribution.

Life Membership payments in their entirety and 10% of all other membership payments and general contributions are placed in the CCRS Endowment Fund. These additions help assure the future of Coyote Creek Riparian Station.

COYOTE CREEK RIPARIAN STATION

P.O. BOX 1027

ALVISO, CA 95002

(408) 262-9204

BIRD HOUSING SHORTAGE BEING CORRECTED

By L. Richard Mewaldt

On lower Coyote Creek and at the IBM Almaden Research Center on Santa Teresa Ridge in south San Jose an evident shortage of nest cavities for hole nesting birds is receiving attention. We are encouraged by the success of our joint CCRS/IBM efforts (**RiparianNews** 4(3):6-7) in 1989 to provide "emergency" housing for Western Bluebirds, Ash-throated Flycatchers, and Violet-green Swallows on the IBM/ARC natural area, and for Tree Swallows at CCRS.

In March several IBM people began training in our CCRS bird-banding program so that they can begin a study of the demography of those hole-nesting birds at the ARC natural area. They will qualify for Sub permits which will authorize them to band nestlings and adults. They have plans to expand their study to include a Nest Box Trail in each of three habitats: oak woodland, open serpentine grassland, and valley riparian.

At CCRS we are also expanding placement of nest boxes to encourage colonization by hole-nesters as our efforts toward restoration of riparian habitat continue. Fundamental is the riparian habitat restoration program of the Santa Clara Valley Water District. These efforts are in mitigation for the District's installation of flood control structures on lower Coyote Creek to protect north San Jose (Alviso District) and Milpitas from floods such as occurred in 1983. (*See story on page 15.*). Our CCRS habitat restoration group, headed by Elinor Spellman, is doing work to supplement and complement the SCVWD restoration efforts mandated as mitigation for this flood control work.

As in 1989, George Honore again assembled salvage building materials from several sources and brought together a group of skilled bird house builders. In mid-March Mr. Honore delivered to CCRS eighty one (81) new bird houses built by Jack Lanham, Tony Ravetto, Fran Hara, and Jerry Rose. As we go to press, these houses are being installed on locations at the IBM Almaden Research Center and along lower Coyote Creek.

BANDER TIPS

By Bruce Katano

This is a new column on how to avoid common banding mistakes.

- Bands, sizes 2 and larger, should be closed with the needle nosed pliers. In case you haven't noticed, these bigger bands tend to open back up a little no matter how hard you squeeze with the banding pliers. This is something that should be demonstrat ed, so have an experienced bander show you how to use the needle nose.
- That large bird that you're trying to put a band on can be put in the weighing can first. Put a bag under the can to keep it from rolling, draw the body out and you'll have both hands free to work the foot.
- A lot of small Recaps are getting their 0 or 1 bands tangled up in the nets. Squeeze the band a couple of times along its entire length to achieve proper closure.
- It's that time of year when you'll start to catch fledglings. After processing, DO NOT release these birds at the trailer. Please take these birds back to its capture site and release it there.
- If you think that your bird is going into shock, stop and put it into the holding cage for 15 to 30 minutes. Birds will recover with a little peace and quiet most of the time.

COYOTE CREEK RIPARIAN STATION

Coyote Creek Riparian Station is a non-profit California membership corporation with United States and California tax exempt status. CCRS is dedicated to research on, and to the restoration and management of, riparian and wetland habitats including the wildlife and other animals that live there. CCRS is located on City of San Jose property near the town of Alviso.

Coyote Creek Riparian Station operates in cooperation with the Santa Clara Valley Water District, San Jose/Santa Clara Water Pollution Control Plant, U. S. Bird Banding Laboratory, Laurel, MD., San Francisco Bay National Wildlife Refuge, and the California Department of Fish and Game.

RiparianNews is published quarterly for the information of our CCRS membership, the personnel of the several cooperating federal, state, and local agencies, and for other organizations and individuals concerned with the flora and fauna of riparian and wetland habitats.

Editor Note: We apologize for the ommission of Elsie Richey's name from our Board of Director's list last issue.