



RipariaNews

Newsletter of the Coyote Creek Riparian Station

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BIRD CENSUSES BEGUN

by Grant Hoyt

In December of last year, I began a semi-regular bird census of the Coyote Creek REACH 1 Mitigation Area, an 87-acre parcel of wetland habitat at the northern end of our CCRS research area. The area had been undergoing major changes as part of a flood control and habitat restoration project (**Figure 1**) until work was halted by winter rains.

After several early morning bird-counting trips this



Figure 1. Earth-moving equipment belonging to PERMA, the SCVWD contractor lies idle in January due to winter rains. Mount Alison on the Wool Ranch can be seen in the background. Photo by Dick Mewaldt.

past winter, I became quite enthused about the prospect of rekindling the censusing of the entire riparian zone along the creek, in addition to the REACH 1 area. I decided to devote all my volunteer hours at the station to this census work, though not without some regret over having to give up banding for awhile. With encouragement and guidance from Dick Mewaldt, I have begun a weekly census of the

creek and the REACH 1 area. Mike Mammoser has been helping since January, and a couple of other experienced birders have shown interest in participating, but more volunteers are needed to establish the consistency and continuity necessary to make this project worthwhile.

This raises the question: Why do a census? Don't we already gather plenty of information about the birds of Coyote Creek from our extensive bird-banding programs? Yes, we do collect and analyze a tremendous amount of data from our nets and traps, but we can gather still more using eye and ear. Inevitably, some species will elude the nets, but can be detected by careful watching and listening. They may be present in large numbers along the creek but netted only occasionally, if at all. Some examples from 12 March: 1 Wilson's Warbler, 1 Western Flycatcher (both "firsts" this Spring), 4 Orange-crowned Warblers and a Golden-crowned Kinglet were noted along the creek during the census, but none of these species were banded that day. Ruby-crowned Kinglets were very active, even singing their elaborate, high-pitched songs; they totalled 12 by census count, but none were banded. Both Cooper's and Sharp-shinned Hawks were observed, although these seldom appear in the nets; nor do the Black-shouldered Kites that were actively displaying and calling up and down the creek. Thus, the census gave us additional data regarding number of species and number of individuals seen on that day.

The reason for censusing the REACH 1 area is more obvious: As a mitigation project which includes revegetation and other habitat restoration, it should be carefully monitored as it grows and changes over the next several years. This area includes a 16-acre brackish pond with an island (**Figure 2**) suitable for gulls, ducks and other waterfowl and a delta-like area which will provide a variety of water-bird habitats. Upstream from the delta, creekside riparian habitat will be re-established by extensive tree and shrub planting. A large patch of pickleweed dominated salt marsh is being saved and more restored for the salt marsh harvest mouse. In some of these locations, weedy vegetation has already begun to reappear on what was barren terrain just a few short months ago.

Moderate numbers of several dozen bird species, including ducks, gulls, herons, egrets, avocets, stilts, raptors,



Figure 2. Sixteen acre brackish pond, with its island, begins to take shape. The "delta" area appears in the background. Photo by Dick Mewaldt.

etc., have been using these new habitats. A few particularly noteworthy species observed over the last few months of censusing include Peregrine Falcon, Canada Goose, and Lesser Yellowlegs. Certain salt marsh "specialty" species, including the Salt Marsh Song Sparrow, the Salt Marsh Yellowthroat, and, of course, the notorious salt marsh harvest mouse, stand to benefit from habitat preservation and improvement. Therefore, the observation of avian activity in this area will provide a valuable yardstick for measuring the progress and ultimate success or failure of this mitigation and restoration project.

As I mentioned above, we are in need of volunteers to help with this project, particularly ones with sharp birding skills. Censusing the riparian corridor along the creek can be difficult if you don't know your field marks and songs, including those exasperating "chip" notes. The waterbird (REACH 1) area is somewhat easier, but some squinting through a telescope is required. The entire census, combining both areas, can be done in 4-5 hours and ideally should be done as a whole. However, if a volunteer had only two hours to spend, he/she could census just one of the areas. Interested participants should contact me at (415) 969-7892.

As spring migration continues and breeding activity heightens, so the pace steps up at CCRS; at the same time, some major topographical changes associated with the flood control project will be taking place in our field research area, including the loss of some riparian habitat, revegetation activities to replace these losses, a change in the course of the creek, creation of new levees, and moving of our CCRS trailer to its new pad well above the flood plain. How will the earth-moving and tree-cutting affect our work, and more importantly, how seriously will it disrupt the bird life along Coyote Creek? I hope that the census can help answer these questions, and further add to and correlate with some of the fascinating data being collected this Spring and in years to come.

OFF THE WALL - THE 1988-89 WINTER SEASON

by Bill Bousman

Once the passage birds are gone and the winter residents have settled in, we know that winter is really here. The banding station reduces operations during this period to about five days a week. The winter season is defined here as the months of December, January, and February. For these months we only expect to see the resident winter species. The one exception to this "rule" is the Allen's Hummingbird.

The first Allen's Hummingbird was captured on 15 Feb. This date is very close to last year's first arrival of 14 Feb. By the end of the month, four birds had been captured. In recent years, many of the respondents who provide me with information for my column in *The Avocet* have been sending me the first arrival dates for many of our migrant species. For Allen's Hummingbird the mean arrival date in Santa Clara County is 7 Feb. ($n = 6$, range 20 Jan. to 25 Feb.). In both 1988 and 1989 the first birds were detected in late January. What is the reason for this difference, assuming a week is a meaningful difference of time? My guess is that at the banding station we are sampling only a very small portion of the population. The majority of the birds are returning to their preferred nesting sites in the foothills, where they are more likely to be encountered.

Despite the absence of migrants, the winter season is not dull. The Summary Board provides information on a number of birds that are quite uncommon or rare locally and I will spend the rest of the column discussing these species.

Winter Wrens were captured on 4 Jan. and 19 Feb. There is a resident population of this species along the forested creeks coming down from the Santa Cruz Mountains. In addition, we have a small wintering population that appears to favor the weedy creeks of the valley floor. Never easy to find, they nonetheless show up regularly on our local Christmas counts; San Jose has averaged four birds per count over the last few years and Palo Alto slightly more (although some of the latter are from the Santa Cruz Mountain population). What was surprising, however, was the capture of three House Wrens, one each on January 19, 28 and 29. These are exceptional numbers. This species is hardly ever found during our Christmastime censusing of the local bird populations.

Golden-crowned Kinglets have not been plentiful in the local area this winter, so the total of ten caught during the winter months is interesting. A single Orange-crowned Warbler was banded on 8 Feb. Like the Winter Wren, a few winter locally along our creeks and are recorded on the Christmas counts each year. Based on last year's new-capture data, the spring migrants will show up along Coyote Creek about the second week in April and then pass through in fairly good numbers (34 in 1988) until the second week in May. For those of us who don't spend all of our

spare time at the Riparian Station, this may seem puzzling. In their nesting habitat in the foothills, the Orange-crowns are almost always singing on territory by the first week in March. The Avocet data show that the mean arrival date (for singing birds) is 3 Mar. ($n = 6$, range 26 Feb. to 16 Mar.). Our local nesting birds are here, then, four to five weeks before the first Coyote Creek migrants. How come? Well, this warbler breeds from California to central Alaska. Those birds that typically breed in central California probably find more than adequate food resources in early March. It is unlikely that there are adequate insect populations in mid-Alaska until considerably later in the season, so it would seem that our Coyote Creek April-May transient Orange-crowns must be from the more northern portion of the population. Similar patterns are observed for other species - the Warbling Vireo is a good example.

Wilson's Warbler is one of our truly rare wintering passerines. A male was banded at the station on 2 Dec. and was recaptured on 1 Jan. Surprisingly, a second bird was captured on 4 Jan. to make it a banner winter for this species. Even more surprising to me is that Ruth Troetschler found one or the other of these two birds upstream from the station on 18 Dec. on the San Jose Christmas Bird Count, one of the few occurrences of this species for this count. I will finish up the tally of rarities with the White-throated Sparrow captured on 3 Dec. and recaptured on 7 Dec. Now, on to Spring!

THE DROUGHT AND THE WATER TABLE

By L. Richard Mewaldt

Creekside riparian habitats depend, at least in part, upon ground water which percolates into the soils of the adjacent flood plain from the creek itself. Dr. Bernard Goldner (SCVWD) and Mr. John Stanley (H&SA) recognized the importance of ground water when they planned the 4-acre pilot revegetation plot adjacent to our CCRS field station. They required the drilling of a series of shallow (10 feet deep) wells, had them lined with PVC casings, and had the wisdom to ask CCRS to monitor the water levels. Beginning with one well in 1985, the number of wells was increased to 15 in and adjacent to pilot revegetation plot 1 in January of 1987. The wells were strategically placed to relate tree establishment and survival to (a) proximity to the creek, (b) irrigation practices, (c) tree species selection, (d) planting technique, and (e) weed control.

This short story tells part of what we learned -- about our water table -- because Mother Nature took us from flood (Figure 1) in February 1986 to the drought we continue to experience in March of 1989.

Our CCRS study area, including the pilot Reveg Plot, is immediately adjacent to the west bank of lower Coyote Creek where it meets San Francisco Bay. The creek is tidal the 2-mile length of our study area. Saline water moving



Figure 1 Syndie Meyer surveys the swirling flood waters from the CCRS field laboratory on 19 Feb. 1986. At photo time the flood water had receded 8 inches from the 4-foot crest 2 hours earlier. Photo by Dick Mewaldt.

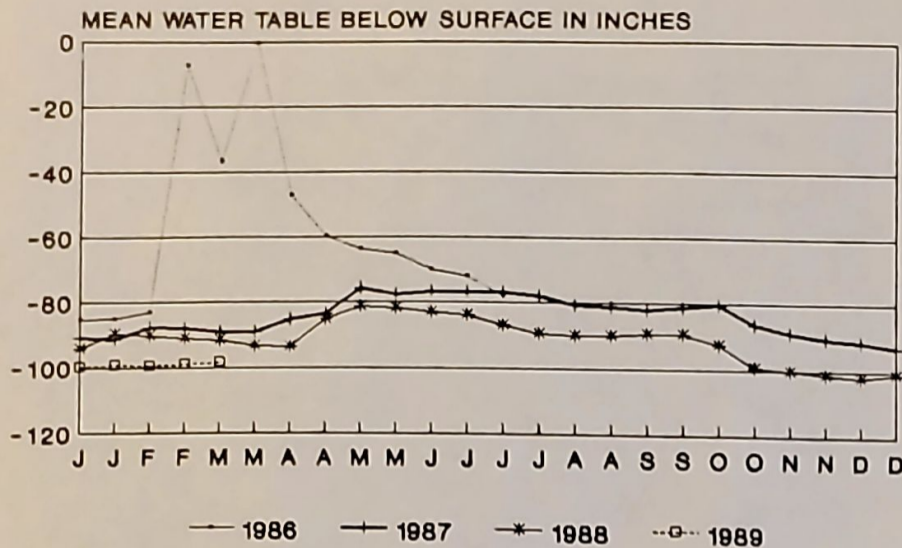
upstream, because of the tide, normally reaches up only about the lower mile. In this instance "normally" is only during the winter months, November to March, when tides ebb and flow unimpeded. The Standish Dam, originally installed to provide salt-free irrigation water for adjacent agriculture is about a mile below the pilot Reveg Plot. From April to October the Standish Dam, with flash boards in place, creates a fresh water lake about 1 1/2 miles long. The water level of this lake, restricted to the creek channel, is about 7 feet NGVD, or about the level of the highest tides.

Using a 12-foot carpenter's retracting tape, with a strip of blotter paper attached to the tip, we (Johnson, Wolf, Katano, and Mewaldt) found free ground water usually varied from 75 to 105 inches below ground level (Figure 2).

From complete ground saturation, due to the floods of 19 February and 16 March of 1986, the water table dropped to about 75 inches in mid-July. Installation of the flash boards in the Standish Dam in mid-April of each of 1987 and 1988 caused 12 to 14 inch rises in the water table at the Reveg Plot. However, in spite of the constant water level (lake) in the adjacent creek channel, the water table dropped 5 to 8 inches in July and August of each year.

The precipitous drop in water level in October of each year was due to draining of the lake with the removal of the flash boards from the Standish Dam. Irrigation procedures on the revegetation plot in the warmer months of both 1987 and 1988 had relatively minor impacts on the water table.

Noteworthy is the consistently lower water table in the second half of 1988 compared to the second half of 1987. Lower water tables in the first 3 months of each successive year following 1986 (i.e. about 85, 90, 95, and 100 inches) seem especially important. They are somewhat distorted by brief episodes of high water in February of 1987 and



1986 FEB & MAR FLOODS, JAN-JUL ONLY
 1987-89 - MEAN OF 15 WELLS
 APR, DAM IN - OCT, DAM OUT

Figure 2. Water table levels at the pilot revegetation plot adjacent to CCRS from January, 1986 to March, 1989. No readings are available from mid-July to December, 1986.

January of 1988, but the trend in lowered water table is undeniable.

We await inventories of plant survival, growth data on surviving plants, and our measures of the wildlife response, to learn something of the effect, so far, of this three-year drought. Look for stories on these matters in future *Riparia-News*. Perhaps it is even more important we be reminded that we gain only limited wisdom from short-term studies.

RECOVERIES OF BANDED BIRDS

We have recently received from the U. S. Bird Banding Laboratory, Laurel, Maryland, the following reports of encounters with birds processed by CCRS personnel.

Gambel's White-crowned Sparrow

Banded as hatching year bird at San Jose on 14 Oct 1987 by Dick Mewaldt.

On its return migration from the Arctic a year later, caught by cat belonging to a neighbor of our CCRS Member Ken Voget on 28 Sep 1988 at Lakeview, Oregon.

Caspian Tern

Banded as nestling near Imperial Beach, CA, close to the Mexican border, by Monte Kirven on 18 May 1968.

Found dead in its 20th year at the Drawbridge Caspian Tern colony, on San Francisco Bay near Alviso, by Dick Mewaldt on 6 Jun 1988.

PRESIDENT'S REPORT

By Michael Rigney

Shortly after the last *RipariaNews* went to press, we received the donation of a new trailer from E.A. Hathaway Construction. The negotiations for this donation were ably handled by our newest Board member Mr. Guy Klitgaard. It didn't take Guy long to canvas a few contracting firms and find this relatively new trailer which is actually bigger and in better condition than our existing facility (see accompanying photo).



New CCRS trailer donated by E.A. Hathaway Construction Company. At its temporary location across from H.T. Harvey and Associates it will soon serve as office space, library and conference room. Photo by Dick Mewaldt.

We thank Mr. Klitgaard for his efforts on our behalf and also the generosity of E.A. Hathaway personnel (in particular the efforts of Mr. Del Gish).

The trailer will be housed temporarily in the storage yard owned by Mr. Bob Gross across from H.T. Harvey and Associates. We hope to have electricity hooked up and telephone service installed in the near future. As soon as that is accomplished the Office Manager, Helen Hoa Le and the Station Manager, Dick Mewaldt will move their operations to the new trailer.

Eventually, as a part of construction in Reach 2 of the Coyote Creek Flood Control Project, a building pad will be constructed near where CCRS's current field trailer resides. This pad will be large enough to accommodate our two trailers (which will be linked together to form one U-shaped building), a small greenhouse, lath-house, native plant garden, several small storage sheds and parking.

This facility will house the burgeoning operation which has become the Coyote Creek Riparian Station well into the foreseeable future. The building of this pad also illustrates the commitment of the Santa Clara Valley Water District to the role of CCRS in its long-term planning for Coyote Creek. We are grateful to Dr. Bernard Goldner, James

Fiedler and George Fowler of SCVWD for continued support and guidance. We continue to be grateful to Mr. Ed Braatelen, Director, San Jose Department of Water Pollution Control, and his staff for the many courtesies extended to CCRS, past and present.

Our various programs continue to grow and improve. Biologist, Blair Wolf and Stephanie Jones recently had a manuscript accepted for publication in the *Condor*. Dr. Max Lincoln and Dick Mewaldt are collaborating with fellow White-crowned Sparrow devotees on a manuscript for *North American Bird Bander*. Elsie Richey continues to take our show on the road with bird banding demonstrations and a new display fashioned by Emmett Dingel of H.T. Harvey and Associates. Year two of the *Santa Clara County Breeding Bird Atlas* is under way guided ably by Bill Bousman.

Dick Mewaldt and Elinor Spellman have applied for a Stream Restoration Grant through the California Department of Water Resources to enhance the riparian plant community near our field station and to experiment with the "Bradley Method" of weed control.

This year CCRS has undertaken the awesome task of summarizing all banding efforts in western North America. Every year the *North American Bird Bander* polls and tabulates submittals of all banders who have permits to band in the Western United States, the western provinces of Canada, Mexico and the Pacific Islands. In all over 500 individuals and agencies have responded to our questionnaire. Phil and Pat Gordon are busily entering all these data into a data base application program developed by B.C. Software's (and CCRS founding member) Bob Johnson. The results of this tabulation will be published in an upcoming issue of the *North American Bird Bander*. Speaking of computers - Bob Johnson informs me that he has sold several copies of *The Bander*, a banding data storage and retrieval program which CCRS helped to develop. A portion of the proceeds derived from each copy sold are donated to CCRS.

All of these activities plus our regular banding program (which is back to a seven-day-a-week schedule) keep our small staff and cadre of dedicated volunteers extremely busy. The work we are doing is exciting, worthwhile and innovative and there is always room for more of you out there to become active members. These last three years have seen our small tail-gate operation grow to a point where we are looking forward to long and stable future. The staff and I would like to thank all of you for your time, energy and financial backing.

SFBBO MONTHLY MEETINGS

We bring to your attention the fine programs arranged by San Francisco Bay Bird Observatory for its monthly meetings. They are usually held on the first Thursday of each month at the San Francisco Bay National Wildlife Refuge Environmental Education Center in Alviso. The Observatory allots time early in each meeting for CCRS news-briefs and announcements.

May 4 - David Lonzarich, Fisheries Biologist, San Francisco Bay National Wildlife Refuge.

- Community profile of fish inhabiting salt evaporator ponds.

Jun 1 - Louise Accurso, Wildlife Biologist, San Francisco Bay National Wildlife Refuge.

- Ducks of the San Francisco Bay.

Jul 6 - Clark Blake, Geologist, United States Geological Survey.

- Geology of the South Bay and surrounding area.

CCRS FISCAL SUMMARY - 1988

Balance in Gen Fund 1 Jan 88 \$1,269.50

Income to General Fund:

Memberships	\$2,820.00
Donations	9,958.98
Endowment earnings	1,747.23
Checking acct. int.	211.54
Contract income	19,655.03
Breeding Bird Atlas	358.00
Misc. income	87.05

Total \$34,824.83

Expenditures from General Fund:

PG&E	\$421.76
Pac Bell	474.51
Insurance	553.52
Payroll (incl tax etc.)	17,855.62
Mist nets	2,357.88
Feed - bait	1,230.93
Equipment	963.90
Office supplies	349.39
RipariaNews (incl post)	2,845.33
General supplies	205.19
Misc. expenses	2,172.96
Breeding Bird Atlas	623.77
Transfer to endowment	2,526.20

Total \$32,580.86

Balance in Gen Fund 31 Dec 1988 \$3,513.47

General Endowment Fund:

Balance 1 Jan 1988 \$17,551.67

Additions in 1988 \$2,526.00

Balance 31 Dec 1988 \$20,077.87

[Book value Jan 1989 = \$18,766.96]

LRM & HHL

* Note that expenses for the Breeding Bird Atlas program exceeded income by \$265.77. Donations to CCRS, earmarked for the Atlas program, will be welcomed.

HELP WANTED

Person(s) willing to volunteer two to four mornings each month planting native species, watering, and weeding in creekside habitat at CCRS contact Elinor Spellman at (408) 395-5526 (H) or (408) 262-9204 (CCRS).

NEW MEMBERS

We welcome 17 new members who joined CCRS in the last three months:

Anaclerio, Alberta	Member
Burnham, Dave	Member
Cotwell, Rita R.	Member
Friedman, Howard, Susan & Jessica	Members
Garcia, Robert and Diane	Life Members
Gill, Robert and Colleen	Members
Hopkins, Rick	Member
Lafer, Stephen	Member
MacCan, Claudette	Member
Ohlsen, Michelle	Member
Tikotsky, John A.	Member
Yale, Dorothy, J.	Member

Membership renewals are coming in very well. Some have upgraded their membership category or made an additional contribution. **Bob and Diane Garcia**, our newest Life Members, are long-time friends and supporters of CCRS.

Life Membership payments and 10% of all other membership payments and general contributions (including some generous contributions from our Life Members) are placed in the CCRS Endowment Fund thereby assuring the future of CCRS.

MEMORIAL FUND CONTRIBUTIONS

IN MEMORY OF WILLIAM J. TILDEN

Hazel Tilden
Fran and Dick Mewaldt

IN MEMORY OF INEZ RIGNEY

Bob and Diane Garcia
Theresa and Michael Rigney

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, Department of Water Pollution Control limited-access land along the

last two kilometers of the west bank of Coyote Creek where it meets San Francisco Bay.

Coyote Creek Riparian Station operates in cooperation with the Santa Clara Valley Water District, San Jose/Santa Clara Water Pollution Control Plant, H. T. Harvey & Associates, Habitat Restoration Group/John Stanley & Associates, San Jose State University, U. S. Bird Banding Laboratory, San Francisco Bay National Wildlife Refuge, and the California Department of Fish and Game.

Riparia News 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 concerned with environmental issues. Please let us know of persons or organizations who might benefit from or enjoy our **Riparia News**.

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Blair O. Wolf, Biologist
Bruce J. Katano, Biologist
Helen Hoa Le, Office Manager
Michael D. Rigney, Editor (Volunteer)

Coyote Creek Riparian Station, P.O. Box 1027,
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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 \$150 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 **Riparia News**. We welcome bequests, including those of real property.
Or in 4 or 5 installments