



RipariaNews

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PARALLEL MONITORING CONTINUED

By Max W. Lincoln and L. Richard Mewaldt

We continue our series on the Crowned Sparrows of the genus *Zonotrichia* (e.g. Lincoln 1988) by comparing year to year numbers, age ratios, and sex ratios of Puget Sound White-crowned Sparrows at two nearby stations. CCRS is in a rural-industrial setting near sea level at the south tip of San Francisco Bay. The Mewaldt home banding station is six miles inland in a residential-golf course setting 250 feet above sea level at the base of the inner coast mountain range. Both stations support substantial winter populations of these migratory sparrows which nest in the Puget Sound area of northwest Washington and southwest British Columbia and winter in the vicinity of San Francisco Bay in west central California (Cortopassi and Mewaldt 1965).

During the last three winter seasons (1985-88) we have banded, or had returned from a previous winter season, 1,329 Puget Sound White-crowned Sparrows (Pugetts) at the two stations (Figure 1). This compares to 2,138 Gambel's White-

crowned Sparrows (Gambels) processed in the same seasons. Whereas Pugetts comprised an average 20 percent of the GOLF population over the last 13 winter seasons, they were more than twice that proportion, an average of 44 percent, of the CCRS population in the last 3 winters.

It is easier to point out such differences in distribution than it is to explain them. It is likely habitat related, as we (Mewaldt and Woon 1959) concluded nearly 30 years ago after mist netting White-crowned Sparrow populations in several parts of the Santa Clara Valley. Perhaps Pugetts prefer the native riparian and weedy field habitat at CCRS rather than the generally well groomed grassland (lawns and golf course fairways) and suburban gardens, fences, and houses (physical barriers). Perhaps the sea level location of CCRS and its close proximity to San Francisco Bay is important, especially when contrasted to the Mewaldt suburban GOLF station at 250 feet above sea level and adjacent to the foothills of the Inner Coast Mountain Range. The quantification of such differences is beyond us at this writing.

The Puget adult/young ratio can hopefully provide us with an index of productivity on the Puget Sound nesting grounds. In three winter seasons from the fall of 1985 through the spring of 1988, young Pugetts have made up 67 percent of the two wintering populations. The year to year and station to station numbers of young birds have varied, however, from 56 to 80 percent (Figure 2).

The contrasting percentages of young birds in the winter populations at these two stations hinder precise estimations of breeding ground productivity. Hopefully, a network of such monitoring stations, as recently recommended by David De-Sante (see Rigney 1988), will improve such assessments.

We used wing-lengths to estimate sex ratios (Mewaldt and King 1986) in the two populations (Table 1). Here we see that in 5 of the 6 age and sex classes, the proportion of males increased with age. In the Golf Drive population the proportion of adult males was greater by 4, 13, and 4 points in the three winter seasons. At CCRS the proportion of males was 10 points (1986-87) and 12 points (1987-88) higher, but 5 points lower in the 1985-86 winter season. The mean increase of 6.3 percentage points suggests strongly that male Puget Sound

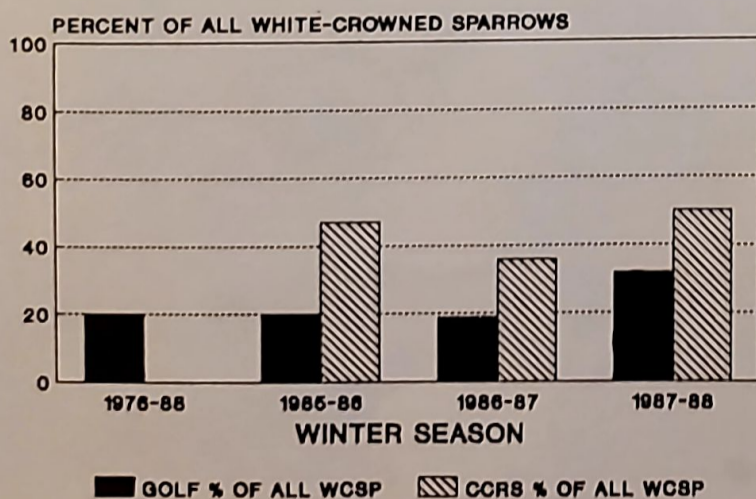


FIGURE 1. Percent that Puget Sound White-crowned Sparrows are of all White-crowned Sparrows at CCRS and at the GOLF station.

White-crowned Sparrows have a survival advantage over females -- that it may be hazardous to be a female White-crown.

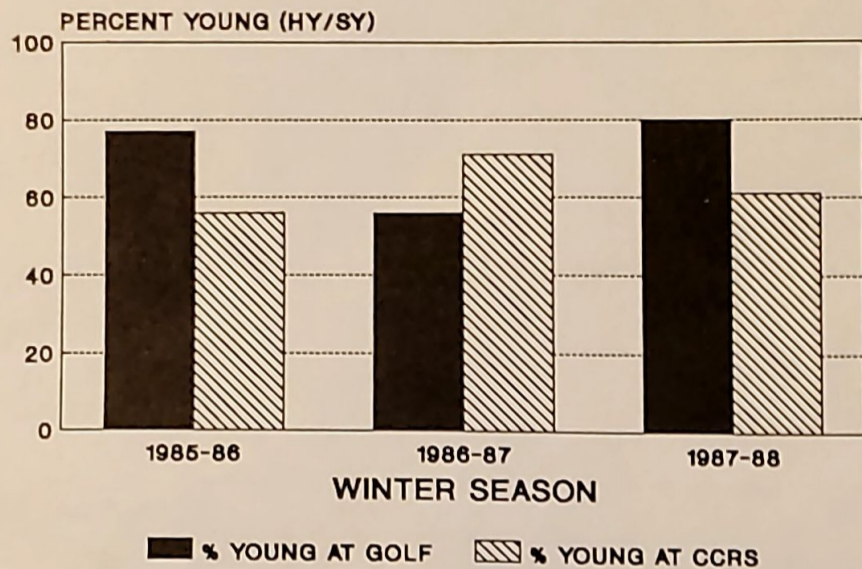


FIGURE 2. Percent of wintering Puget Sound White-crowned Sparrows that were produced in the previous nesting season.

TABLE 1. Total numbers, known age composition, and estimated sex ratio of Puget Sound White-crowned Sparrows at two San Francisco Bay area bird monitoring stations.

	1985-86		1986-87		1987-88	
	CCRS	GOLF	CCRS	GOLF	CCRS	GOLF
All Wh-cr	581	390	1014	222	952	308
# Puget	272	77	369	41	472	98
# Gamb	309	313	645	181	480	210
Pugets of known age*						
Young	127	58	228	19	278	74
Adult	99	17	94	15	176	19
Est Puget M/F ratio						
Young	58/42	52/48	50/50	47/53	43/57	49/51
Adult	53/47	56/44	60/40	60/40	55/45	53/47

*Excludes sparrows first encountered after 28 February.

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Hummingbirds Like Tree Tobacco

By Blair O. Wolf

The importance of introduced exotic plants to the avifauna of California is especially apparent when looking at our local hummingbird species and their association with Eucalyptus trees (*Eucalyptus spp.*) and Tree Tobacco (*Nicotiana glauca*). The Eucalyptus trees number only about four or five at Coyote Creek, but Tree Tobacco is much more abundant and is a common species bordering the trail which parallels the creek. The Tree Tobacco is a naturalized plant from South America. It is a scrubby, sparsely leaved tree, generally 6 to 20 feet in height. Its leaves are medium-sized bluish-green and it bears large clusters of tubular yellow flowers that bloom almost year-round. Significantly it is also considered drought resistant (See Figure 1).

In July 1988 the constant fighting of large numbers of hummingbirds in a patch (25 to 30 trees) of Tree Tobacco in the future overflow channel attracted my attention. Dedicated bander that I am, I decided some of these hummingbirds should be banded. Soon afterwards I strategically placed four 12-meter 30 mm nets at various points among the Tree Tobacco plants.

The nets were run on four occasions for a total of approximately 11 hours. In all 27 hummingbirds of 5 species were banded (See Table 1).



FIGURE 1. Biologist Blair Wolf extracting a Hummingbird from a mist net set in a stand of Tree Tobacco.

Table 1 Numbers of hummingbirds captured of each species by age and date banded. HY — Hatching Year, AHY — After Hatching Year, ANHU — Anna's Hummingbird (*Archilochus anna*), BCHU — Black-chinned Hummingbird (*Archilochus alexandri*), CAHU — Calliope Hummingbird (*Archilochus calliope*), ALHU — Allen's Hummingbird (*Selasphorus sasin*), RUHU — Rufous Hummingbird (*Selasphorus rufus*)

SPECIES AGE	ANHU		BCHU		CAHU		ALHU		RUHU	
	HY—AHY	HY—AHY	HY—AHY	HY—AHY	HY—AHY	HY—AHY	HY—AHY	HY—AHY	HY—AHY	HY—AHY
DATE										
08/20/88	4	0	0	0	0	0	6	0	2	0
08/21/88	0	0	1	3	0	0	2	0	0	0
08/26/88	1	0	0	0	1	0	3	0	1	0
08/28/88	1	0	0	0	0	0	0	0	2	0
TOTAL	6	0	1	3	1	0	11	0	5	0

The importance of Tree Tobacco as a source of nectar has been noted by several authors (Bent, 1940, Grinnell and Miller, 1944, Stiles 1972b). Migrant species obviously concentrated around this rich source of food and appeared to use these scrubs as refueling stations on their way to the wintering grounds. Not shown in the table is the fact that only two of the hummingbirds banded were recaptured at a later date. This tends to support the transient nature of the population during migration. The more sedentary species such as the Anna's Hummingbirds established winter feeding territories around these scrubs thus ensuring an almost uninterrupted source of food during the blooming period. The actual number of individual hummingbirds using these trees and the rate of turnover of birds during migration is open to speculation. A more thorough banding program during the migration would be of value.

Interested volunteers are encouraged to contact me or Dick Mewaldt regarding hummingbird banding.

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Off the Wall — the 1988 Fall Season

by Bill Bousman

I sat down one Sunday at the end of November and scribbled numbers off of the CCRS Bird Banding Summary board into my notebook. My interest was not the rarer species, but the more common ones. Data from banding operations like ours provide a wonderful source of information which can help quantify the temporal distribution of our native birds. This season the station was manned continuously from 1 Aug to 23 Oct. Missing dates after that were 24 and 31 Oct and 9 Nov. As you can see this coverage is nearly complete and

therefore, the daily records entered on the Summary Board provide an excellent sample of the bird populations passing through.

Two entries are shown on the Summary Board - new captures and recaptures. The latter category can include birds returning from previous years or birds banded during this season. Without going to the notebooks I can't tell whether a recap is a first record for the year or not, so I didn't consider them further. For my analysis, then, I looked at all of the new captures from 1 Aug to 26 Nov. From these data I computed the date of the first occurrence, the 10th percentile occurrence, the median occurrence, the 90th percentile occurrence, and the last occurrence. Unfortunately, I couldn't resist swapping lies with Dick Mewaldt and Blair Wolf when I should have been entering data and I never got around to some of the species that occur in large numbers.

Obviously, this kind of data characterization is most appropriate for true migrants. For species with a strong summer component in the local area, the initial numbers will be less meaningful, and similarly for those with a strong winter component the latter dates are not meaningful. Orange-crowned Warbler (OCWA) is a good example of a bird where some of the captures will be locally dispersing residents, some will be migrants, and a few will be winter resident birds. Accepting these limitations, the data are nonetheless interesting and I have tabulated below the species I consider to be primarily migrants.

TABLE 1. Fall 1988 Migrants — New Capture Data

Species	No.	First	10th %	Median	90th %	Last
BCHU	17	27 Jul	14 Aug	17 Aug	4 Sep	28 Sep
RUHU	14	19 Aug	26 Aug	3 Sep	14 Sep	18 Sep
ALHU	18	10 Aug	14 Aug	20 Aug	26 Aug	3 Sep
WWPE	12	8 Aug	10 Aug	14 Sep	20 Sep	24 Sep
WIFL	35	24 Aug	26 Aug	12 Sep	23 Sep	28 Sep
WEFL	400	1 Aug	19 Aug	11 Sep	27 Sep	15 Oct
SWTH	84	28 Aug	11 Sep	22 Sep	7 Oct	14 Oct
WAVI	17	8 Aug	19 Aug	15 Sep	21 Sep	29 Sep
OCWA	41	1 Aug	5 Sep	23 Sep	30 Oct	16 Nov
YEWA	164	4 Aug	4 Sep	18 Sep	28 Sep	21 Oct
MGWA	8	8 Sep	—	25 Sep	—	9 Oct
WIWA	49	19 Aug	26 Aug	15 Sep	4 Oct	21 Oct
WETA	14	4 Aug	13 Aug	11 Sep	18 Sep	25 Sep
BHGR	13	1 Aug	3 Aug	22 Aug	25 Sep	25 Sep

Note that most of these migrants show their median passage date in September. The exceptions are Black-chinned Hummingbird (BCHU), Allen's Hummingbird (ALHU), and Black-headed Grosbeak (BHGR) — these are our earliest migrants. Few species show a significant migration extending into October as is indicated by the 90% passage date. The exceptions here are Swainson's Thrush (SWTH), Orange-crowned Warbler, and Wilson's Warbler (WIWA).

An interesting feature of these migration data is the abundance of each species. The top five in rank order of abundance are Western Flycatcher (WEFL), Yellow Warbler (YEWA), Swainson's Thrush, Wilson's Warbler, and Orange-crowned

Warbler. Note that the Willow Flycatcher (WIFL) was captured almost 9% as often as Western Flycatcher — few of us see them in the field in the ratio of one in ten.

The biggest surprise to me is the large number of Black-chinned Hummingbirds migrating through. The conventional wisdom is that our area is at the northwest extremity of their breeding range. Where are they nesting — to the north of us?

A few migrants were caught in such small numbers that it makes no sense to try to characterize their passage dates. Still, their presence along the creek is interesting. Included in this group are Calliope Hummingbird (26 Aug) Hammond's Flycatcher (20 Aug), House Wren (5 Sep), Solitary Vireo (26 Sep), Nashville Warbler (20 and 29 Aug), Black-throated Gray Warbler (17 Sep), and Hooded Oriole (14 Aug).

The winter resident birds, when they arrive, show a clear bow wave and then the numbers of new captures trails off as one would expect. The 90% and last occurrence dates probably depend more on how long the banding station is operated into the winter months than anything else. However, first, 10th and median dates give some idea of when the winter populations arrive and how extended this arrival is. Looking at the daily capture data it seems to me that the 10th percentile date seems to characterize the arrival best. The closeness of the 10th percentile and median dates give some idea of how quickly the birds are moving in or if the arrivals drag out because different subspecies are involved or whatever. I plot those birds I consider winter residents in the next table and I ignore the 90th percentile and last dates.

Notice that I only put in the first dates for Audubon's Warbler (AUWA), the Puget Sound race of White-crowned Sparrow (PSWS), and Gambel's race of the White-crowned Sparrow (GWCS) — next year I hope to do better. Two White-throated Sparrows (9 and 12 Oct) are not included in the table because of the low numbers. I will guess that if I had collected the data for Audubon's Warbler and the two races of White-crowned Sparrow they would have led the pack in terms of numbers. The next five species in rank order are: Hermit Thrush (HETH), Golden-crowned Sparrow (GCSP), Fox Sparrow (FOSP), Lincoln's Sparrow (LISP), and Ruby-crowned Kinglet (RCKI).

TABLE 2. — Fall 1988 Winter Residents — New Capture Data

Species	No.	First	10th %	Median
WIWR	3	7 Sep	—	11 Sep
GCKI	11	8 Oct	18 Oct	22 Oct
RCKI	43	19 Sep	30 Sep	29 Oct
HETH	248	18 Sep	28 Sep	15 Oct
VATH	7	6 Nov	—	12 Nov
MYWA	3	29 Sep	—	8 Oct
AUWA	—	18 Sep	—	—
TOWA	7	14 Aug	—	26 Sep
FOSP	126	4 Sep	18 Sep	4 Oct
LISP	98	4 Sep	14 Sep	2 Oct
GCSP	164	22 Sep	29 Sep	19 Oct
PSWS	—	14 Sep	—	—
GWCS	—	13 Sep	—	—

Most of these winter species are showing about 16 to 20 days between the 10th percentile and median dates — there don't seem to be many differences here. If I were to pick one thing out of the table as a surprise it is the 14 Aug arrival date of Townsend's Warbler. This species nests south to Oregon and is a notorious late passage bird in the spring. They are often found on passage into the last week in May and first week of June. Somehow, I have not expected them to show up as early as this bird did. With more years of data some of this may make more sense to me.

CCRS BIRD BANDING SUMMARY — 1988

By L. Richard Mewaldt

Total numbers of birds banded, numbers recaptured, and total species processed in 1988 (Figure 1, Table 1) were each down slightly from 1987. This was even though our effort in terms of net-hours and trap-hours was higher in 1988. We had net decreases in each of August, September, and October, which bracketed the fall migration.

In 1988 we added five to our Station list of species banded: Common Snipe, Ringed Turtle Dove, Black and White Warbler, American Redstart, and Yellow-breasted Chat. One of the two Chats captured in May, a male, remained for more than two weeks and sang, in creek-side habitat, as though on territory. This gives us hope that as we restore our riparian habitat, Yellow-breasted Chats may also be restored as breeders.

To understand annual variation in numbers of birds encountered in our CCRS monitoring program, we must look to many factors including:

(1) Our basic effort and efficiency. These are of course important, but for now we shall assume they were approximately the same in 1986, 1987, and 1988.

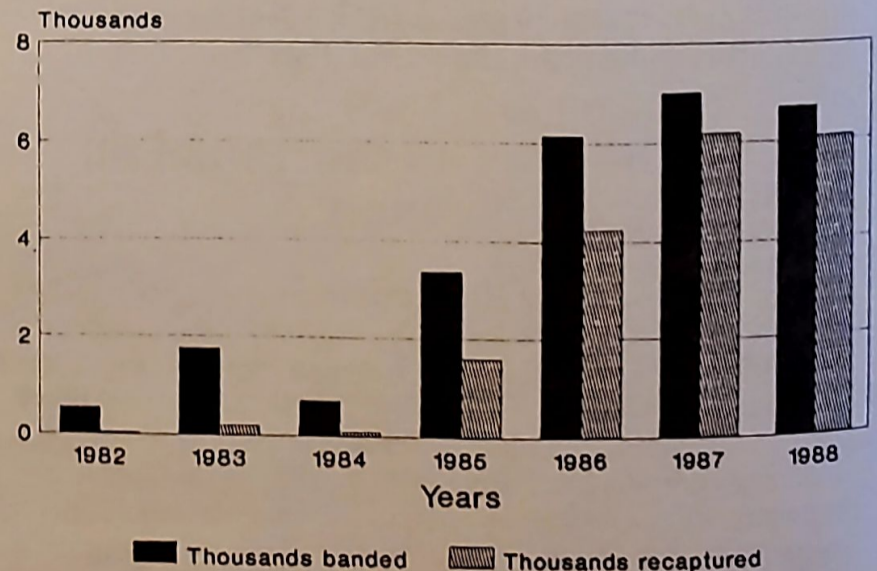


FIGURE 1. Birds banded and recaptured at Coyote Creek from 1982 to 1988.

TABLE 1. CCRS Bird Banding Summary — 1988

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Northern Harrier						2							2
Sharp-shinned Hawk				2								3	5
Cooper's Hawk										1	1		2
Red-tailed Hawk	1										1		2
American Kestrel		1	2				1			1		1	6
Ring-necked Pheasant					1	2							3
California Quail			1	1									2
Common Snipe												1	1
Ringed Turtle-Dove								1					1
Mourning Dove	2	3	15	13	39	33	22	38	22	2	13	2	204
Burrowing Owl					3	1							4
Saw-whet Owl											1		1
Black-ch. Hummingbird				2		6	2	13	3				26
Anna Hummingbird	7		4	3	7	6	8	21	14	6	1	6	83
Calliope Hummingbird								1					1
Rufous Hummingbird			1	1				6	8				16
Allen Hummingbird		3	2	4	1	1	1	17	1				30
Belted Kingfisher				1						1			2
Downy Woodpecker						7	1						8
Red-shafted Flicker		2	1						1	7	3	2	16
Hybrid Flicker											2		2
Western Wood Pewee					2	1		4	8				15
Willow Flycatcher						2	1	7	27				37
Hammond's Flycatcher									1				1
Western Flycatcher			1	16	16	9	5	148	233	18			446
Ash-th. Flycatcher				1		4	1						6
Black Phoebe		1	1	15	12	36	17	9	4	1	1		97
Western Kingbird				1									1
Tree Swallow			1	1	3	9							14
Violet-green Swallow								2					2
Rough-winged Swallow					1								1
Cliff Swallow					2	1	1						4
Barn Swallow					3	1		4					8
Scrub Jay				1				1	3				5
Chestnut-bk. Chickadee		1		1	9	2	2		2	1	1	3	22
Common Bushtit	5	5	4	7	4	8	7	3	1	2	1	2	49
Brown Creeper						1							1
Bewick's Wren						3	1			1			5
House Wren				1			1		1				3
Winter Wren		1							2	1			4
Golden-crowned Kinglet										8	3	8	19
Ruby-crowned Kinglet	9	4		2	2				4	21	18	23	83
Swainson's Thrush				7	192	30	1	3	59	21			313
Hermit Thrush	60	28	17	79	8				34	166	58	9	459
American Robin	15	48	5		2	2	1						73
Varied Thrush	4	1		2							9		16
Northern Mockingbird			1	1	3	4	5	10	11	3	2		40
Cedar Waxwing					1								1
Loggerhead Shrike	1			4	3	1	4	4	2			1	20
Starling				2	7	7	1						17

TABLE 1. Continued. CCRS Bird Banding Summary — 1988

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Solitary Vireo									1				1
Hutton's Vireo												1	1
Warbling Vireo				3	5	1		3	16				28
Orange-crowned Warbler		2	2	18	14	1	1	3	19	14	4		78
Nashville Warbler				1				2					3
Yellow Warbler					9	1	2	17	140	5			174
Myrtle Warbler	2	3	1	1					1	1	1	4	14
Audubon's Warbler	8	16	41	24					3	45	19	27	183
Black-th. Gray Warbler				1					1				2
Townsend's Warbler						1		1	3	2	1	1	9
Black and White Warbler										1			1
American Redstart										1			1
MacGillivray's Warbler				2	6	1			7	1			17
Salt Marsh Yellowthroat	1	5	7	12	8	4	8	13	11	2		1	72
Wilson's Warbler				23	74	2		6	42	8		1	156
Yellow-breasted Chat					2				2				4
Western Tanager					1			2	12				15
Black-headed Grosbeak					4	5	8	10	4				31
Lazuli Bunting						1							1
Rufous-sided Towhee			1						3	1			5
Brown Towhee	3	2		2	1	8	2	12	8	1		2	41
Savannah Sparrow			13	8				1	10	6	3		41
Fox Sparrow	5	3	3	6					59	53	22	13	164
Song Sparrow	11	10	15	46	96	68	28	32	15	3	3	9	336
Lincoln Sparrow	9	7	20	18	4				42	40	18	18	176
White-throated Sparrow										2			2
Golden-cr. Sparrow	32	27	24	9					22	89	59	68	330
Puget Snd. Wht.-cr.Sp.	20	24	29	11					37	112	54	32	319
Gambel's White-cr. Sp.	14	40	50	41					56	108	108	47	464
Oregon Junco		1	2	1					1	6	4		15
Red-winged Blackbird		1	56	86	34	2					7	6	192
Brown-headed Cowbird			2	8	3	4	4						21
Hooded Oriole			1				1	1					3
Bullock's Oriole				3	6	1							10
Purple Finch					1								1
House Finch	106	72	116	70	250	220	185	240	111	14	52	41	1477
Pine Siskin	1												1
Lesser Goldfinch	3	1		1	4		1	10	7				27
American Goldfinch	2		9	13	13	4	14	12	26	4	17		114
House Sparrow			2										2
Total new captures	321	312	450	576	856	503	336	658	1100	780	487	332	6711
Recaptures	431	582	659	609	401	246	118	267	369	615	710	1092	6099
Species banded	23	27	33	48	41	41	30	35	48	40	30	27	90
Days of operation	17	16	18	29	31	29	22	31	30	28	20	19	290

TABLE 2. Numbers of selected species captured new and banded at CCRS

Selected species	1986	1987	1988
Mourning Dove	83	140	204
Willow Flycatcher	41	40	37
Western Flycatcher	460	520	446
Black Phoebe	87	121	97
Golden-crowned Kinglet	2	3	19
Ruby-crowned Kinglet	18	33	83
Swainson's Thrush	237	451	313
Hermit Thrush	181	378	459
American Robin	7	13	73
Varied Thrush	8	22	16
Warbling Vireo	8	28	28
Orange-crowned Warbler	32	35	78
Yellow Warbler	110	42	174
Audubon's Warbler	32	69	183
Salt Marsh Yellowthroat	44	49	72
Wilson's Warbler	38	96	156
Black-headed Grosbeak	23	30	31
Fox Sparrow	310	155	164
Song Sparrow	481	382	336
Lincoln Sparrow	168	195	176
Golden-crowned Sparrow	667	421	330
Puget Sound White-cr Sp	365	372	319
Gambel's White-cr Sp	499	418	464
Oregon Junco	44	32	15
Red-winged Blackbird	185	158	192
Brown-headed Cowbird	9	12	21
Brewer's Blackbird	0	1	0
House Finch	1345	1911	1477
Released unbanded	(2922)	(2608)	(1012)
Lesser Goldfinch	97	153	27
American Goldfinch	96	105	114
House Sparrow	4	9	2

(2) Our monitoring area is undergoing change as the Water District revegetation effort, by Harvey & Stanley Associates, increases riparian habitat quantity and quality.

(3) On the other hand, beginning in mid- 1988 major earth-moving activity by PERMA, Contractor for Water District, removed some of the riparian habitat we had been monitoring. (See story elsewhere in this issue of *RipariaNews* which tells of improvements in progress in the marsh-land portion of our study area.)

(4) Activities on the adjacent sludge lagoons, and on truck-cropped farm land across Coyote Creek have remained about the same in those three years.

(5) Actual changes in numbers captured by species (Table 2) permit us to move from the general to the specific in our quest for answers. In fact, it is sufficient to note that the specific decrease of 434 in numbers of House Finches processed (from 1987 to 1988) is more than enough to account for the general

decrease of 297 in the total numbers of new bandings from 7008 in 1987 to 6711 in 1988. To extend that point, we must observe that by our CCRS banding bench protocol we band no more than 10 new House Finches on a banding day and release the rest without bands. We do record the number of House Finches so released unbanded.

It is indeed tempting to speculate on reasons, other than vagaries in sampling, for the changes in numbers of various species listed in Table 2. Certainly there were increases in many insectivorous species including both Golden-crowned and Ruby-crowned Kinglets, Hermit Thrushes, Orange-crowned Warblers, Yellow Warblers, Audubon's Warblers, Salt Marsh Yellowthroats, and Wilson's Warblers. Was this because of the improving quality of our riparian habitat?

Perhaps, but there have been so many other variables that we may have difficulty to provide a cause and effect relationship. What will our 1989 data show?

Note that there have been general decreases in numbers of seed-eaters. Note also that Brewer's Blackbirds and House Sparrows are inexplicably all but absent from our study area. Indeed, it is easier to ask questions than to provide meaningful answers.

Yes, it is fun to ask and seek.

Although most of the banding in 1988 was done by eleven regulars (service on more than 50 days), another 47 people contributed many days of service, especially seasonally, to our monitoring effort. Banders and helpers of record in 1988 were:

- | | |
|------------------|-------------------|
| Michelle Abare | Walt Avery |
| Sally Beavers | Peggy Brown |
| Adrienne Buck | Jeff Caldwell |
| Katie Colbert | Derek Currall |
| Chris Cutler | Maryann Danielson |
| Penny Delevoryas | Diana Domeier |
| Heidi Ernst | Kevin Foerster |
| Maureen Foerster | Marilyn Fowler |
| Russ Fowler | Leslie Freed |
| Barry Garrison | Cindy Goral |
| Elizabeth Hayes | Gloria Heller |
| Grant Hoyt | Karen Hoyt |
| Chris Illes | David Johnson |
| Stephanie Jones | Bruce Katano |
| Abe Klein | Rob Klingner |
| Joe Le Fevre | Kay Loughman |
| Clarice Lincoln | Max Lincoln |
| Mike Mammoser | Pat Mann |
| Dick Mewaldt | Tom Myers |
| Jim Miguelgorry | David Moyles |
| Lynn Neibaur | Paul Noble |
| Rod Norden | Chris Otahal |
| Elsie Richey | Jerry Richey |
| Mike Rigney | Edith Rondeau |
| Hawkeye Rondeau | Margaret Roper |
| Allen Royer | Lynn Tennefoss |
| Lloyda Thompson | Jerry Waldorf |
| Mark Wilcox | Blair Wolf |
| Stan Wright | Jeanette Zubkoff |

The following persons were volunteers of record in CCRS activities other than bird banding in 1988:

John Delevoryas
Stephanie Jones
Guy Klitgaard
Jerry Richey
Judy Wong
Allen Royer

H. Thomas Harvey
Gerard Kettmann
Chris Otahal
Elinor Spellman
Fran Mewaldt
Theresa Rigney

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 at 7:30 on the first Thursday of each month at the San Francisco Bay National Wildlife Refuge Environmental Education Center in Alviso. The Observatory has agreed to allot us time early in each meeting for CCRS news briefs and announcements. LRM

February 9* **Joel H. Hornstein**. Sutter County Department of Health.

Topic: Lyme disease and other arthropod vectored diseases that may be potentially hazardous to birders.

* Second Thursday

March 2 **Peter Pyle**. Point Reyes Bird Observatory.

Topic: Birds of the Pacific, including the Farallons.

April 6 **John Steiner**. San Francisco Bay NWR.

Topic: Butterflies of the San Francisco Bay region.

May 4 **David Lonzarich**. San Francisco Bay NWR.

Topic: Profile of Fish inhabiting salt evaporator ponds.

June 1 **Louise Accurso**. San Francisco Bay NWR.

Topic: Ducks of the San Francisco Bay.

WATERBIRDS ARE WELCOME

by Dick Mewaldt

In the northerly portion of our CCRS field research area the Santa Clara Valley Water District flood control project is progressing on schedule. Between outboard levees designed to control the 100-year flood, on-site mitigation measures include habitat features especially attractive to water birds.

Among these habitat features is a 16-acre brackish water pond, with its central island, already discovered (Figure 1) by gulls of several species as well as egrets, shorebirds, and some Ruddy Ducks.

When earth-works are completed later this year and vegetated with appropriate plants during the following year, it will provide feeding, nesting, resting, and escape habitat for water-related birds from ducks, egrets, sandpipers, and rails to Salt Marsh Song Sparrows, Marsh Wrens, and the federal candidate endangered San Francisco Bay Salt Marsh Yel-



FIGURE 1. Waterbirds at the pond.

lowthroat.

Grant Hoyt and co-volunteers began in December a regular program of bird censuses of the pond and its island, a delta-like area with channels and islands, and other wet-land features along lower Coyote Creek. These censuses will provide a record of the wildlife use of the area from its present bare earth and water until it is vegetated wetland habitat. Thereafter, continued monitoring will provide the bases for the wise management of the area.

If you would like to participate in this program, contact Grant (415-969-7892) directly or through CCRS. We also welcome volunteers able and willing to study and monitor the vegetation and the invertebrate fauna.

SSHA Recaptured

by Kay Loughman

A male Sharp-shinned Hawk, banded as an adult on November 4, 1986 by Syndie Meyer, was recaptured in a mist net at CCRS on December 3, 1988. The bird was removed from the net by Tom Myers (a veteran of the Mewaldt Wool Ranch banding program) and Kay Loughman. Back at the trailer, Hawkeye and Edith Rondeau processed the bird and recorded it on film (see Figure 1).

In the two years since it was banded, the hawk had grown; its weight had increased and the wing chord was longer. Thanks in part to comments by Allen Fish of the Golden Gate Raptor Observatory (whose presentation on restraint and handling of raptors at the 1988 Western Bird Banders Association (WBBA) meeting proved unexpectedly timely) both bird and neophyte handlers emerged from the encounter unscathed.



FIGURE 1. Sharp Shinned Hawk returns to CCRS. Photo by Hawkeye Rondeau.

RECOVERIES OF BANDED BIRDS

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

Black-crowned Night Heron

Banded as nesting on Bair Island, San Mateo Co. 12 July 1973 by Gill, Mattish, and Mewaldt.

Found dead by Anthony Wayne at Palo Alto Baylands, Santa Clara Co. on 1 Jan 1988 when 14 1/2 years old.

Caspian Tern

Banded as nestling on Drawbridge Colony, Alameda Co. on 8 Jul 1971 by Gill and Mewaldt.

Recovered injured (died) by Barbara Mc Knight at Daly City, San Mateo Co. on 29 Apr 1988 when 16 3/4 years old.

Great Horned Owl

Banded as hand reared juvenile and re-released 5 Sep 1982 in Santa Clara Co. by Rigney.

Found dead by Michael Newborn at Rancho San Antonio, Santa Clara Co. 23 Jul 1988 when 6 years old.

Mourning Doves

Three banded at CCRS on 6 Jun 88, 20 Jul 88, and 29 Aug 88 by Dick Mewaldt, David Johnson, and Bruce Katano respectively.

Shot by two different hunters near Milpitas, Santa Clara Co., all on 6 Sep 1988.

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. We will acknowledge Memorial contributions in **RipariaNews**. We welcome bequests, including those of real property.

*Or in 4 or 5 installments

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 restoration and management of riparian and wetland habitats. CCRS is located on City of San Jose, Department of Water Pollution Control limited-access land along the last two miles 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, Harvey and Stanley Associates, San Jose State University, U. S. Bird Banding Laboratory, Laurel, MD., San Francisco Bay National Wildlife Refuge, and the California Department of Fish and Game.

RipariaNews 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. Let us know of others who might benefit from or enjoy our **RipariaNews**.

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 Blair O. Wolf, Biologist II
 Bruce Katano, Biologist I
 Helen Hoa Le, Office Manager
 Michael D. Rigney, Editor (Volunteer)
 Chris Illes, Associate Editor (Volunteer)

Coyote Creek Riparian Station, P.O. Box 2019, Alviso, California 95002 -- (408) 262-9204

Recent Visitors of Record

Ms. M. Kathleen Klimkiewicz, U.S. Bird Banding Laboratory, Laurel, MD
 Dr. Hans J. Ernst, Saratoga, CA
 Mr. Lawrence W. Wolf, Liverpool, NY
 Dr. William & Connie Mewaldt, Fallon, NV
 Mr. George H. Fowler, Santa Clara Valley Water District, San Jose, CA
 Dr. Delbert B. Tarter, San Angelo, TX
 Mr. Kenneth W. Voget, Lakeview OR
 Dr. Ann Riley, Sacramento, CA
 Dr. Arto & Lenna Vuorjoki, Oulu, Finland
 Bird Study Class — Ms. Patricia Jacobson
 Bird Study Class — Ms. Maryann Danielson
 Field Trip, California Native Plant Society, Jeff Caldwell
 U.S. Army Corps of Engineers study group, Sacramento and San Francisco
 Marsh Management Workshop, U.S. Fish & Wildlife Service, Kevin Foerster



FIGURE 1. California Native Plant Society Visits CCRS. Photo by Chris Illes

Memorial Fund Contributions

IN MEMORY OF INEZ I. RIGNEY: Alviso Staff of Harvey & Stanley Associates, Dick and Fran Mewaldt.

New Members

We welcome 9 new members who joined us in the last three months:

Balgooyen, Thomas PhD.	Member
Koenen, Toni	Member
Lawson, Jessie	Member
Mann, Patricia	Active Member
Myers, Thomas & Lorraine	Active Members
Rainer, George E.	Member
Smith, Jerry PhD.	Member
Stanley, Jolan T.	Member

Membership renewals are coming in very well. Some have upgraded their membership category or made additional contributions.

Life Membership payments and 10% of all other membership payments and general contributions (including some generous contributions by our Life Members) help assure the future of CCRS by being placed in our CCRS Endowment Fund.

CCRS Bird Banding at Other Stations

by Dick Mewaldt

During 1988, CCRS personnel banded birds at several locations remote from our Coyote Creek Riparian Station study area:

- (1) A National Park Service sponsored workshop at Lundy Lake on the east slope of the Sierra Nevada by Mike Rigney and Bob Yutzy.
- (2) A Pilot study at Long Barn in the central Sierra Nevada by Elsie and Jerry Richey.
- (3) A class demonstration for UC Santa Cruz in the Granite Mountains of Saurhter California by Blair Wolf and Chris Cutler.
- (4) Banding demonstrations by Elsie & Jerry Richey and David Johnson for (a) Natural Bridges State Beach at Santa Cruz, (b) Youth Science Institue at Alum Rock Park, and (c) San Francisco Bay National Wildlife Refuge at Newark and at Alviso.

These several activities involved the banding of more than 200 birds of about 25 species and brought CCRS bandings for 1988 to nearly 7000 birds of more than 100 species.