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Maryann Danielson
933A Alice Lane
Menlo Park, CA 94025

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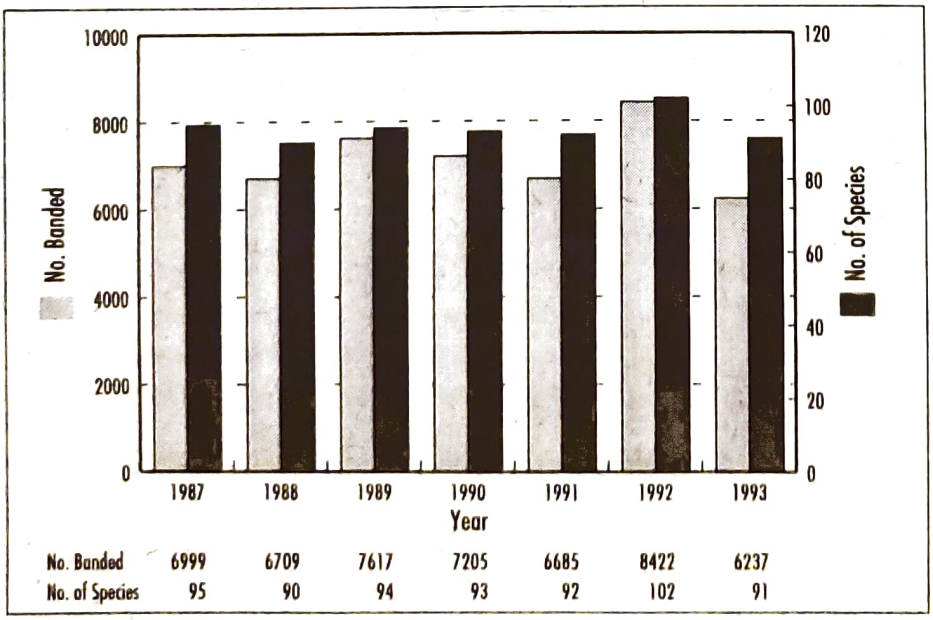
Banding Summary for 1993

By Kristin Shields and Bruce J. Katano

Coyote Creek Riparian Station completed another successful year of banding in 1993. However, due to a reduction in the number of days of operation during the summer and winter (slack time at the station), and the cessation of trapping of birds, the number of birds banded was one of the lowest in the last five years (see Figure 1). Although the number of birds banded was down substantially, the number of species captured was down only slightly from previous years (except, of course, for our record total in 1992).

During the spring and fall migrations the station operated 7 days a week to ensure we monitored any migratory waves. The total number of new bandings for the year was 6,237, with a total of 91 species during 295 days of operation (see Table 1 on pages 6 and 7). In addition, 4,212 birds were recaptured one or more times during the year.

Figure 2 summarizes our monthly capture rate (or efficiency) based upon the number of net-hours per month. The capture rate for Fall migration was about half last year's figure, but a cursory glance at Figure 2 shows that high capture rates occurred in alternate years (in this case 1990 and 1992) and that 1993 may have just been a "low year." We look forward to this year's fall migration with great interest to test this hypothesis.



	1987	1988	1989	1990	1991	1992	1993
No. Banded	6999	6709	7617	7205	6685	8422	6237
No. of Species	95	90	94	93	92	102	91

Figure 1. Banding Summary for CCRS (Alviso Field Station Only from 1987 to 1993).

The most abundant species banded at Coyote Creek Riparian Station in 1993 was the **Western Flycatcher** (officially known as the **Pacific-slope Flycatcher**). A total of 896 new WEFL's (as they are fondly called in the banding lab) were banded, with a high of 72 on a single day in August. For the first time in six years, a species other than the **House Finch** became the annual "banding leader." This may be a result of the various riparian revegetation efforts at the creek and their subsequent effects on the environment.

Figures 3 and 4 show the top five species banded during Fall and Spring migration. It is interesting how different the species were from season to season. Also noteworthy was the fact that the top five Fall migrants (with the Western Flycatcher a major portion) outnumbered the top five Spring migrants by a three-to-one ratio. **Rufous Hummingbirds** (the only non-passerine to make either list) formed a major portion of Spring migrants. Is the station situated in a major migratory corridor for this particular hummingbird? By banding in other areas of Santa Clara County this spring, CCRS investigators hope to answer this and other questions concerning the migration of this species.

Two species new to CCRS were banded in 1993. One was a **Rock Wren** captured on October 23. This bird was seen frequenting the lumber pile next to the CCRS trailers for several days before Rita Colwell and Kristin Shields set up a net and coaxed it in. This was a special bird for us because, although

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The Birds of Santa Clara County

by Bill Bousman
(Copyright February, 1994)

7 = 1

Cosmologists are fond of saying that 10 = 1; by this they mean that if they can calculate anything within a factor of ten, then they have demonstrated that they are equal. People who write checklists are not that much different. When I say that two birds are rare I don't mean that both are equally likely to be found in a particular habitat. In fact, you are just about as likely to run into the rarest of the uncommon birds as you are the most common of the rare birds. To illustrate this point, I have taken data from the last five Palo Alto Christmas Bird Counts (CBCs) and Summer Bird Counts (SBCs) and, after normalizing the number of birds seen by the number of party-hours, I have plotted the natural logarithm (ln) of the birds/party-hour for all species after reordering the birds by rank. That is, I place the most common bird first, the next most common second, and so on. I show the results in Figure 1 and, as can be seen, the data follow a fairly straight line on the log plot, from the most common to the most rare. We find more species on the CBC than we do on the SBC; that's why the data extend past 200 species for the five years, but we also find a larger total of birds on the CBC and that is why its curve is above the SBC curve.

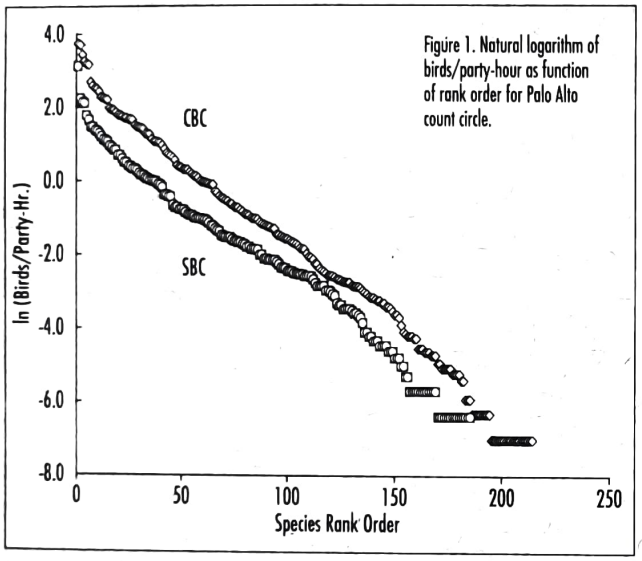

Figure 1. Natural logarithm of birds/party-hour as function of rank order for Palo Alto count circle.

The interpretation of the data in Figure 1 from an ecological perspective is interesting in its own right, but what is important here is the insight that this curve gives us in distinguishing among the common, fairly common, uncommon, and rare. It seems natural that there should be just about as many fairly common species as there are common species, just as many uncommon as fairly common, just as many rare as uncommon, and so forth until we run out of words or birds. So, the curve in Figure 1 should be partitioned so that there are equal increments in terms of numbers of species. It really doesn't matter if we draw vertical lines or horizontal lines. One possibility is to draw a line through zero, which corresponds to 1 bird/party-hour, then a second line through -2, a third through -4, and so on. We can then give each of our partitions a name and, when the birding gets slow, we can argue endlessly about what is common and what is rare. But the point that I wish to make here is that no matter how we draw our partitions the most common "rare" bird will be much more likely than the least common "rare" bird. In the example here, in fact, it will be seven times more abundant. The corollary to this is that the rarest of the "uncommon" birds will have almost exactly the same frequency of occurrence in birds/party-hr as the most common of the "rare" birds.

In terms of frequency of occurrence our birds form a continuum and the divisions we make are necessarily arbitrary. Despite this arbitrariness, there are many good reasons to create these divisions, primarily to communicate what we know about how common a bird really is. As I continue my work on the development of the Santa Clara County Checklist it is a lesson I need to remember, that a checklist is about communication, not about numbers.

Herons and Ibises

We have records for nine species of herons in Santa Clara County as well as one ibis. The distribution over the year of these ten species is shown in Figure 2, where a thick line indicates a species is "common," a thin line means "uncommon," a dashed line represents "rare," and a dotted line "very rare." These distribution curves are based on all records from the county notebooks. A double asterisk indicates that the species is a regular nester, while a single asterisk indicates that the species has nested at least once since 1950. Four of our herons are common throughout the year in the county, and our encounters with these sometimes graceful, sometimes ungainly ancient birds is always a delight.

Bitterns are normally secretive birds, and because of this their true status is difficult to determine. The American Bittern winters locally in small numbers, and I show the distribution of records since 1980 in Figure 3. Figure 4 shows the sightings per winter for the same period. There is a 15 Aug 75 record from Foothills Park which may represent a bird dispersing from one of the coastal

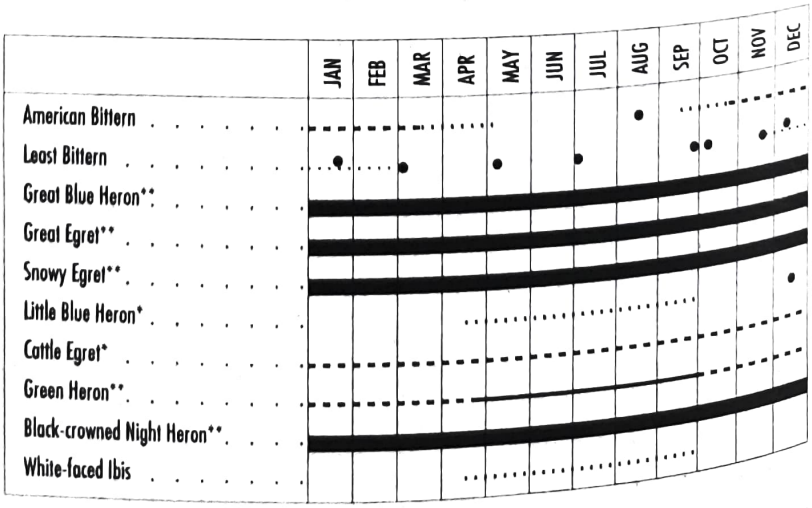

Figure 2. Distribution of herons and ibis in Santa Clara County.

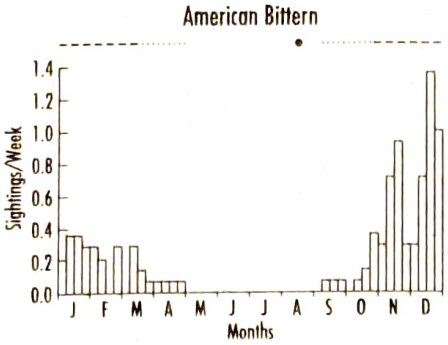

Figure 3. American Bittern yearly distribution in sightings/week (1980-93).

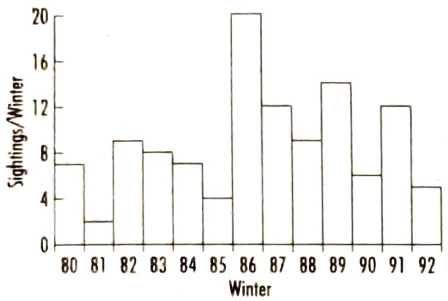

Figure 4. American Bittern winter distribution, 1980-93, in sightings/winter.

marshes where they occasionally breed. I show this record as a separate symbol as it does not fit the typical pattern. The earliest fall arrival date is 15 Sep 89 and the last spring departure is 29 Apr 90. It is not clear whether these records represent migrating birds that pass through or a portion of the wintering population. The number of birds reported varies from winter to winter as indicated by Figure 4, but there is no discernible trend.

Grinnell and Miller (1944) considered this species locally common in California, but noted that it was declining with the loss of freshwater marshes and suitable lake margins. Sibley (1952) considered it a fairly common resident in the South Bay and noted nesting records from Irvington and Lake Merced. Gloria Heller, in her research on the egg collections at the Western Foundation of Vertebrate Zoology, uncovered an egg set collected by H. R. Eschenburg of Gilroy on 1 May 37. The notation on the card says only that the eggs were taken in Santa Clara County, and, on this basis, is our only breeding record for this species. The South Bay today is depauperate in freshwater marshes, and this species is at best a rare winter visitant to our salt water marshes. Will it ever again breed locally?

Least Bittern is every bit as secretive as its larger cousin and far more rare in the local area. The first observation of this species in the county was in the "Mountain View Marshes" on 20 Jan 39 (fide Sibley, 1952). To date I have seven records of this species, as indicated in Figure 5. Except for a bird that wintered at the Palo Alto Baylands 18 Nov 82-4 Mar 83, all of our records have been of birds seen only for a day or two. Records have occurred in every season, but most tantalizing was a bird seen this past summer on 3 Jul 93 (Mike Mammoser, Valerie Layne, and Sue Macias) along South Coyote Slough. Flushed from heavy cover in an area with little visitation, it raises the hope that someday this least of the ardeids might nest in the South Bay.

The Great Blue Heron is a common, permanent resident of Santa Clara County. This species tends to concentrate near its nesting colonies in spring and summer and then disperse from these colonies in the fall; however there is no clear seasonal movement or significant augmentation or decline of the population in the winter. Peak numbers recorded on the Palo Alto CBC were 52 in 1989, while the SBC recorded 65 birds in 1990. The increase in numbers on the summer count is largely caused by the occupation of the nesting colony near Searsville Lake. This Searsville colony appears to have been occupied at least since the 1950s (Sibley, 1952), but most colonies, particularly the smaller ones, appear less stable. Unpublished atlas data shows that this species often forms one or two pair nesting "colonies" at sites well away from the bay.

Great Egret is also a common, permanent resident, and as with the Great Blue Heron, there is no apparent seasonal movement. This species was widespread and abundant in California prior to the 1880s, but its numbers were so severely reduced by the feather trade that it was rare by the turn of the century. Sibley (1952) noted that it was unrecorded in the South Bay from 1880 to 1928. Numbers recovered in areas of suitable habitat, and by 1943 it was once again

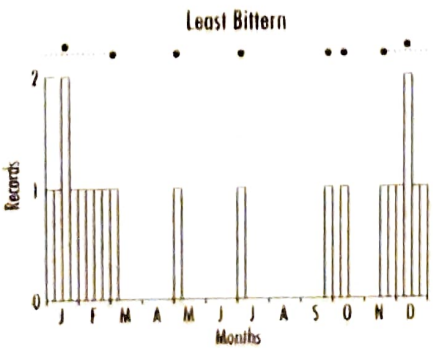

Figure 5. Least Bittern yearly distribution in records (1939-93).

considered common in California (Grinnell and Miller, 1944). Locally, by 1952, Sibley (1952) considered it a common resident as well. In recent years peak numbers recorded in the Palo Alto count circle include 54 birds on the 1988 CBC and 59 on the 1993 SBC. Large concentrations of this species occasionally occur in fall along the bay, presumably attracted by concentrations of suitable prey. Two hundred and fifty were counted on the Mountain View salt ponds 3 Nov 82 (Bill Bousman; AB 37:219) and 113 were on Shoreline Lake 7 Dec 85 (Ed Gustafson).

Sibley (1952) reported that there was a colony of Great Egrets southeast of Agnews in the early 1950s. By the summer of 1969, Don McLean (AFN 23:690) noted that there were no remaining colonies in the Santa Clara Valley. I don't know when the present colony in Alviso was established, but today this bird is a common nesting species in the Alviso heronry. We all eagerly anticipate a published and accessible summary of this colony based on the years of monitoring by the San Francisco Bay Bird Observatory.

The Snowy Egret, half the size of its cousin the Great Egret, is also common in the county and a permanent resident. As with the two larger herons this species is more likely to be found near its nesting colonies in the summer but wanders widely the rest of the year. However, there is no apparent seasonal movement. Like the Great Egret, this species was hunted for its plumes in the 1880s and 1890s and was nearly extirpated by the turn of the century (Grinnell and Miller, 1944). Its recovery was significantly slower than the Great Egret, and by 1950 it was considered an uncommon winter visitant to the South Bay (Sibley, 1952). Three birds, wintering at Vasona Reservoir in December 1958, were considered sufficiently noteworthy to be reported in *Audubon Field Notes* (AFN 13:317). Times have changed (for the better) and it is now common year round in the South Bay. Peak counts in recent years in the Palo Alto count circle include 113 birds on both the 1988 and 1992 Palo Alto CBCs and 195 on the 1989 SBC. This species is also attracted to suitable prey concentrations in late summer. Three hundred and ninety were counted in Charleston Slough 3 Aug 92 (Al Eisner) and 340 were found in the vicinity of the Sunnyvale Water Pollution Control Plant ponds 24 Jul 93 (Steve Rottenborn). It is perhaps the most common heron nesting in the Alviso heronry. Chris

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Swarth reported 150 nesting pairs there on 18 Apr 80 (AB 34:811). The comings and goings from the heronry of this golden-slippered ardeid, as observed from Alviso Slough on a June day, are spectacular.

Of our rare herons, the Little Blue Heron is, in many ways, most closely associated with Santa Clara County. In the 1940s Grinnell and Miller (1944) assessed the California status of the species as a "sporadic winter visitant . . . but evidence not wholly conclusive in that no specimens have been taken." That was the end of an era where the distribution of our avifauna was determined from museum collections by professional ornithologists. Despite their reluctance to accept sight records, Grinnell and Miller (1944) noted an observation of an adult ". . . watched by three observers on August 10, 1940, in Mountain View Marshes, Santa Clara County, [much the most certain sight record]." Grudging praise indeed from two of the greatest western ornithologists.

Despite that pre-World War II record, the next local observation of Little Blue Heron did not occur until Dave DeSante recorded an immature bird in the Palo Alto Yacht Harbor 27 Jul 67 (AFN 21:601). Following that sighting the species has been found regularly in the South Bay, although it remains very rare. Figure 6 shows the distribution of records since 1980; the number of sightings per year is shown in Figure 7. The species is a summer resident, although there is a single winter record of an immature off Hwy 237 on 16 Dec 79 (Mike Rigney). Some years there are few sightings of this heron, but 1993 was a banner year, with at least one pair nesting in the Alviso heronry and a number of birds foraging on the salt ponds near the confluence of Alviso Slough and Coyote Creek. On 29 Aug 93 four adults

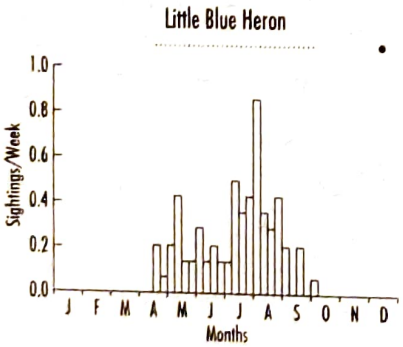

Figure 6. Little Blue Heron yearly distribution in sightings/week (1980-93).

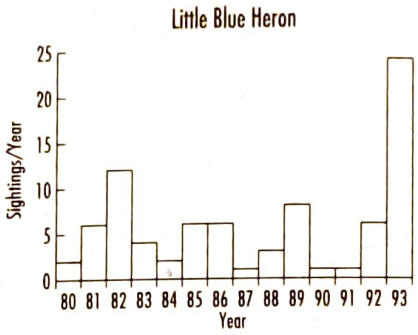

Figure 7. Little Blue Heron distribution, 1980-93, in sightings/year.

were found in Salt Pond A9 (Rich Jeffers), the largest concentration recorded in the county.

Nesting of this species was first reported in the Alviso heronry in 1980. *American Birds* reported "Little Blue Herons nested at the Alviso heronry. Two juvenals[sic] were seen along with one or more that may have been Little Blue Heron X Snowy Egret hybrids (SB). This represents the first confirmed, successful nesting for the Region." (AB 34:925). Some confusion exists about this first nesting record as a later report in American Birds for 1988 states "A pair of ad. Little Blue Herons with a just-fledged juvenile near Alviso, Santa Clara, Aug. 5 (P. Woodin) furnished the first proof of successful nesting of a pure pair of this species in the Region" (AB 43:162).

The presence of Snowy Egret X Little Blue Heron hybrids presents some identification problems for local birders. Reports of a "calico" Little Blue Heron were received from the fall of 1986 until July of 1991. Although this bird appeared to have the blotchy white and blue feathering of an immature Little Blue transitioning to its first adult plumage, careful observation indicated that the bird was a hybrid. The most obvious characteristic of its hybrid origin was its yellow lores, but contributing to this identification was its year round presence in the Palo Alto area (like its Snowy parents) and its "transition" plumage that never changed. One of the final observations of this strange bird was in the Alviso heronry on 4 May 91 when it was observed paired with a Snowy Egret (Peter Metropulos and Mike Mammoser).

Cattle Egrets are a recent invader to this hemisphere and were not found in California until 1962, or from the Middle Pacific Coast Region until 1966 (AFN 24:534). The first record for Santa Clara County was of a single bird at the "Green Valley Hunting Club," eight miles east of Gilroy on 14 Feb 70 (Van

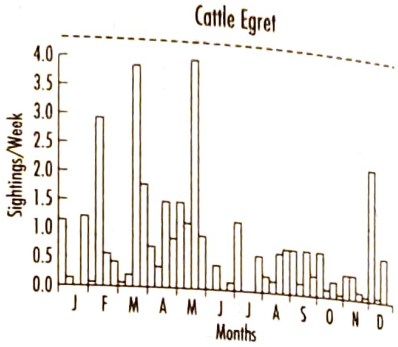

Figure 8. Cattle Egret yearly distribution in sightings/week (1980-93).

Remsen and Mike Perrone; AFN 24:534). I show the yearly distribution of records since 1980 in Figure 8 and the total sightings per year in Figure 9. Numbers are variable from week to week and this egret appears slightly more common in the late winter and spring than in the summer and fall. We have had a

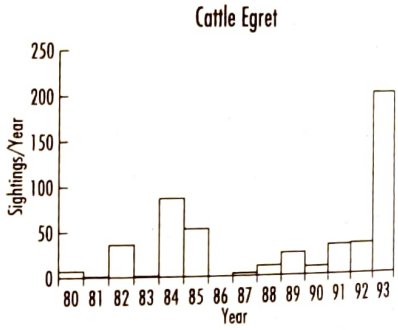

Figure 9. Cattle Egret distribution, 1980-93, in sightings/year.

few years when no birds were reported, but they have been slightly more reliable in the last few years as they have irregularly used the Arzino Ranch, a horse boarding area between Los Esteros and Nortech Parkway in Alviso. On occasion they have been seen to ride on the horse's backs, in the best tradition of their species. On other days they have moved elsewhere, and one is as likely to find them foraging for insects in a light industrial park and, when sated, roosting on parked cars.

The first breeding record for Cattle Egret was obtained on 22 May 85 when Roy Lowe noted approximately ten nests with eggs in the Alviso heronry (AB 39:345). Apparently this egret has bred regularly in the heronry since that time.

Green Herons, unaffected by the years of being called Green-backed Heron, have always bred in the Santa Clara Valley, but their status has apparently changed in the last 50 years. Grinnell and Miller (1944) noted that they were local summer residents in California, with some individuals wintering

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1993 Banding Summary

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it does occur in Santa Clara County, it is not usually seen on the valley floor. This individual has been consistently seen around the wood pile through the winter. The other new species, a male **Hooded Warbler,** was captured on May 23 and was also seen along the creek some days afterward. After a two-year absence, 1993 also marked the return of the **Golden-crowned Kinglet.**

As in previous years, CCRS members conducted banding programs at several locations in California. These included Lundy Lake and Long Barn in the Sierra Nevada, McClellan Ranch in Cupertino, Coyote Hills Regional Park, Humboldt Bay, and the IBM research facility in South San Jose. CCRS also supplied bands to raptor rehabilitation personnel at Wildlife Rescue of Palo Alto. Birds banded as a result of these efforts are summarized in Table 2.

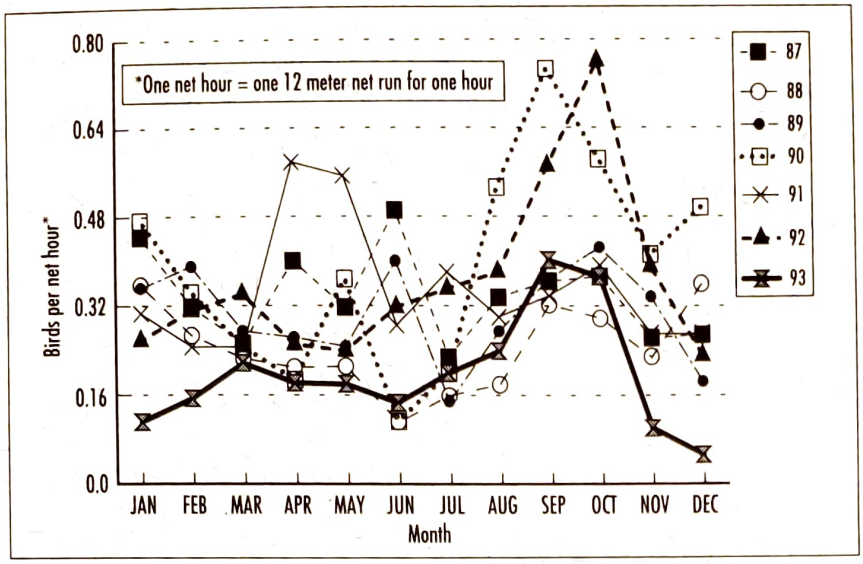

Figure 2. Monthly Capture Rate of Mist Nets from 1987 to 1993.

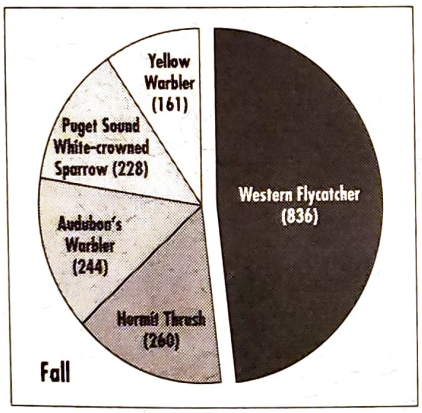

Figure 3. Top Five Banded Species During Fall Migration (Numbers Banded in Parenthesis).

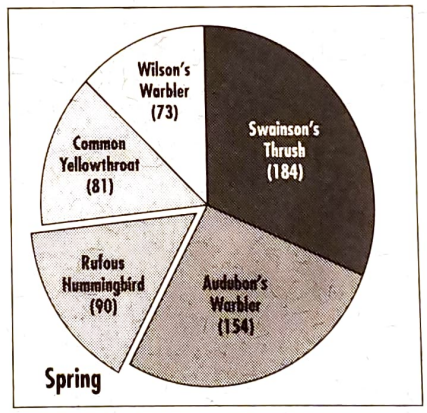

Figure 4. Top Five Banded Species During Spring Migration (Numbers Banded in Parenthesis).

Table 2. Number of Birds Banded at Locations Other Than CCRS During 1993.

Streaked Shearwater	1
Sharp-shinned Hawk	3
Cooper's Hawk	5
Red-shouldered Hawk	2
Red-tailed Hawk	6
Great Horned Owl	2
Common Barn Owl	12
Calliope Hummingbird	1
Rufous Hummingbird	4
Red-breasted Sapsucker	6
Hammond's Flycatcher	2
Dusky Flycatcher	3
Western Flycatcher	1
Ash-throated Flycatcher	2
Mountain Chickadee	8
Plain Titmouse	32
White-breasted Nuthatch	1
Red-breasted Nuthatch	1
Bewick's Wren	7
House Wren	41
American Dipper	2
Western Bluebird	69
Hermit Thrush	2
American Robin	8
Solitary Vireo	2
Warbling Vireo	2
Orange-crowned Warbler	28
Nashville Warbler	13
Yellow Warbler	7
Myrtle Warbler	2
MacGillivray's Warbler	10
Wilson's Warbler	14
Black-headed Grosbeak	1
Brown Towhee	1
Fox Sparrow	2
Song Sparrow	10
Lincoln's Sparrow	1
Mountain White-crowned Sparrow	1
Oregon Junco	7
Cassin's Finch	1
House Finch	9

Table 1. Coyote Creek Riparian Station Bird Banding Summary for 1993

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Sharp-shinned Hawk	–	–	–	–	–	–	–	–	–	2	1	–	3
Red-shouldered Hawk	1	–	–	–	–	–	–	–	–	–	–	–	1
California Quail	–	–	1	–	–	–	–	–	–	–	–	–	1
Killdeer	–	–	–	3	7	–	–	–	–	–	–	–	10
American Avocet	–	–	–	3	4	–	–	–	–	–	–	–	7
Western Sandpiper	–	–	–	–	5	–	–	–	–	–	–	–	5
Mourning Dove	–	–	10	8	10	6	4	–	1	3	–	–	42
Northern Saw-whet Owl	1	–	–	–	–	–	–	–	–	–	–	–	1
Black-chinned Hummingbird	–	–	–	7	1	2	12	12	7	–	–	–	41
Anna's Hummingbird	5	3	10	18	20	19	21	42	42	26	13	7	226
Calliope Hummingbird	–	–	–	–	1	–	–	–	–	–	–	–	1
Rufous Hummingbird	–	1	23	66	1	1	1	6	–	–	–	–	99
Allen's Hummingbird	–	3	10	14	16	19	4	–	–	–	–	–	66
Downy Woodpecker	–	–	1	1	3	7	2	2	–	–	–	–	16
Red-shafted Flicker	2	–	1	–	–	–	–	–	–	3	–	–	6
Flicker Intergrade	1	–	–	–	–	–	–	–	–	–	–	–	1
Western Wood-Pewee	–	–	–	–	2	–	1	1	1	–	–	–	5
Olive-sided Flycatcher	–	–	–	–	1	–	–	–	–	–	–	–	1
Gray Flycatcher	–	–	–	–	1	–	–	–	–	–	–	–	1
Willow Flycatcher	–	–	–	–	–	–	–	12	8	1	–	–	21
Hammond's Flycatcher	–	–	–	3	–	–	–	–	–	–	–	–	3
Dusky Flycatcher	–	–	–	1	–	–	–	–	–	–	–	–	1
Western Flycatcher	–	–	4	9	29	5	13	345	479	12	–	–	896
Ash-throated Flycatcher	–	–	–	–	4	2	–	–	1	–	–	–	7
Black Phoebe	–	1	1	–	16	17	32	9	9	3	–	–	88
Violet-green Swallow	–	2	–	–	–	–	–	–	–	–	–	–	2
Tree Swallow	–	3	–	2	–	–	–	–	–	–	–	–	5
Northern Rough-winged Swallow	–	–	–	1	–	1	–	–	–	–	–	–	2
Cliff Swallow	–	–	–	–	–	1	–	–	–	–	–	–	1
Barn Swallow	–	–	–	1	8	7	5	1	–	–	–	–	22
Scrub Jay	–	–	–	1	–	–	–	–	–	–	–	–	1
Chestnut-backed Chickadee	–	–	–	1	6	12	8	–	1	–	–	2	30
Common Bushtit	1	6	11	8	31	35	9	14	4	1	3	3	126
Brown Creeper	–	–	–	–	–	–	–	–	–	–	2	–	2
Rock Wren	–	–	–	–	–	–	–	–	–	1	–	–	1
Bewick's Wren	–	–	–	–	1	2	3	2	1	–	–	–	9
House Wren	–	–	–	1	–	–	1	2	3	–	–	–	7
Winter Wren	–	–	1	–	2	–	–	1	5	2	1	–	12
Golden-crowned Kinglet	–	–	–	–	–	–	–	–	–	2	3	–	5
Ruby-crowned Kinglet	2	1	3	–	–	–	–	–	7	52	13	4	82
Swainson's Thrush	–	–	–	10	174	4	–	2	48	30	–	–	268
Hermit Thrush	29	8	12	47	3	–	–	–	72	188	33	12	404
American Robin	4	6	16	5	6	4	4	3	–	1	–	–	49
Varied Thrush	–	–	–	–	–	–	–	–	–	1	5	–	6
Northern Mockingbird	–	–	3	4	3	5	29	9	15	3	–	–	71
Loggerhead Shrike	1	–	–	1	–	1	3	4	4	–	–	–	14
European Starling	–	–	–	4	6	–	4	–	–	–	–	–	14
Solitary Vireo	–	–	–	–	1	–	–	1	–	–	–	–	2
Warbling Vireo	–	–	–	–	4	–	3	5	6	–	–	–	18
Orange-crowned Warbler	–	–	6	28	11	–	4	2	41	14	3	–	109
Nashville Warbler	–	–	–	3	–	–	–	–	–	–	–	–	3
Yellow Warbler	–	–	–	–	17	–	–	20	135	6	–	–	178
Western Palm Warbler	–	–	–	–	–	–	–	–	–	–	1	–	1
Myrtle Warbler	2	26	48	13	–	–	–	–	3	90	6	1	189
Audubon's Warbler	5	34	102	52	–	–	–	–	30	214	28	2	467
Black-throated Gray Warbler	–	–	–	3	–	–	–	–	–	–	–	–	3
Hermit Warbler	–	–	–	1	–	–	–	–	–	–	–	–	1
Townsend's Warbler	–	–	–	–	–	–	–	–	1	–	–	–	1
Northern Waterthrush	–	–	–	–	1	–	–	–	–	–	–	–	1

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
MacGillivray's Warbler	–	–	–	–	2	–	–	–	–	–	1	–	3
Common Yellowthroat	–	–	18	53	10	6	10	26	29	6	–	–	158
Hooded Warbler	–	–	–	–	1	–	–	–	–	–	–	–	1
Wilson's Warbler	–	–	1	29	43	1	1	7	28	3	–	–	113
Yellow-breasted Chat	–	–	–	–	2	–	–	–	2	–	–	–	4
Western Tanager	–	–	–	–	–	–	1	–	2	–	–	–	3
Black-headed Grosbeak	–	–	–	2	4	3	6	–	5	–	–	–	20
Lazuli Bunting	–	–	–	1	2	–	2	1	–	–	–	–	6
Spotted Towhee	–	–	–	–	–	–	–	–	–	2	2	–	4
Brown Towhee	–	–	–	–	1	3	8	6	5	–	–	–	23
Clay-colored Sparrow	–	–	–	–	–	–	–	–	–	1	–	–	1
Savannah Sparrow	–	–	–	2	–	–	–	3	5	4	–	1	15
Fox Sparrow	5	2	4	–	–	–	–	–	33	35	8	3	90
Song Sparrow	2	2	4	4	59	62	38	40	20	7	–	1	239
Lincoln's Sparrow	5	7	17	31	1	–	–	–	68	48	14	5	196
White-throated Sparrow	–	–	–	–	–	–	–	–	–	5	1	1	7
Golden-crowned Sparrow	8	15	18	9	–	–	–	–	42	74	31	23	220
Puget Sound White-crowned Sparrow	11	16	25	4	–	–	–	–	77	151	28	16	328
Gambel's White-crowned Sparrow	2	8	28	26	–	–	–	–	22	96	62	16	260
Oregon Junco	–	–	2	1	–	1	–	–	1	7	4	–	16
Red-winged Blackbird	11	10	30	6	11	–	1	–	–	–	–	–	69
Tricolored Blackbird	–	–	–	1	1	–	–	–	–	–	–	–	2
Western Meadowlark	–	–	–	–	1	–	–	–	–	–	–	–	1
Brewer's Blackbird	–	–	–	1	8	1	–	–	–	–	–	–	10
Brown-headed Cowbird	–	–	29	26	2	6	5	–	–	–	–	–	68
Hooded Oriole	–	–	–	–	–	2	4	–	–	–	–	–	6
Bullock's Oriole	–	–	–	3	8	28	7	–	–	–	–	–	46
House Finch	51	63	38	13	16	46	160	109	14	8	2	5	525
Pine Siskin	–	–	1	–	–	–	–	–	–	–	–	–	1
Lesser Goldfinch	2	–	2	2	6	1	5	1	1	1	1	–	22
American Goldfinch	1	1	23	23	8	5	9	37	10	–	–	–	117
House Sparrow	–	–	–	–	4	1	2	–	1	–	–	–	8
New bandings	152	218	503	556	585	316	422	725	1289	1103	266	102	
Cumulative	152	370	873	1429	2014	2330	2752	3477	4766	5869	6135	6237	6237
Species banded	22	21	33	49	51	33	35	30	42	36	24	16	91
Cumulative	31	37	44	65	79	81	82	83	84	89	91	91	
Recaptures	324	441	719	407	233	166	168	248	435	394	359	318	4212
Cumulative	324	765	1484	1891	2124	2290	2458	2706	3141	3535	3894	4212	
Days of operation	19	16	27	29	31	22	18	31	30	31	26	15	295

We would like to thank the following volunteers for their help on our long-term banding program:

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Kay Loughman
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Neil Multack
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The 1993 Fall Season

by Bill Bousman

The station operated continuously from August 1 through November 21 (the last date I recorded data from the Summary Board in the banding lab) except for September 18. Tabulating our regular migrants first, I have recorded their passage dates in Table 1 below. In calculating the fall migration percentile dates, I arbitrarily start with the first of July and finish with the 21st of November. This doesn't have much of an effect for most migrants except to show an unusual first or last date every once in a while. The median or 50th percentile date provides a good measure of the mid-span of migration; and 10th and 90th percentile dates provide a good representation of the length of the migration. I show the 10th and 90th percentile dates only when we band at least ten birds.

(OCWA). We had only slightly more birds than last year for our best fall ever. The median passage date was slightly early, but this may be biased since I have not yet included December records, which might change this slightly. The Orange-crowned migration is always protracted compared to our other migrants; we also encounter a few birds who remain into winter. Our fifth most common migrant this year was **Wilson's Warbler** (WIWA). Numbers were fairly typical, but the median passage date was five days late and the birds came through faster than normal.

Fall numbers of **Rufous Hummingbird** (RUHU) are variable at the station — this was one of our low years. Also low this year was **Willow Flycatcher** (WIFL); we more typically see 30 to 40 birds in the fall (although hardly any in the spring). We banded only one **Ash-throated Flycatcher** (ATFL) this fall, a single bird on September 17. A **Solitary Vireo** (SOVI) on August 11 was unusual for either spring or fall. Rare western warblers included a **Hermit Warbler** (HEWA) on September 14, a very late **MacGillivray's Warbler** (MGWA) on November 8 (recaptured November 17), and **Yellow-breasted Chats** (YBCH) on September 8 and 15. A single **Western Palm Warbler** (WPWA) on November 10 was our only vagrant warbler, and was particularly interesting as this was an invasion year in Northern California and birds were observed in numerous locations in the county. I would have expected us to have netted many more birds, considering their abundance locally, but we did not. Probably our best bird of the fall was a **Clay-colored Sparrow** (CCSP) on October 11. This is the third record for the Station and only the fifth record for the county.

Last departure dates for birds that are resident nearby and first arrival dates for wintering species are shown in Table 2.

Unlike last fall when we encountered exceptionally high numbers in three different wintering species, this fall was largely unremarkable. Most wintering birds arrived around their normal time and showed up in typical numbers. We banded four **White-throated Sparrows** (WTSP): October 18, 20, 26 and November 6; but these were our only unusual early winter birds.

Table 1. Fall 1993 — New Capture Data

Species	No.	First	10th %	50th %	90th %	Last
Rufous Hummingbird	8	18 Jul	-	14 Aug	-	10 Sep
Western Wood-Pewee	3	29 Jul	-	14 Aug	-	15 Sep
Willow Flycatcher	20	17 Aug	18 Aug	29 Aug	22 Sep	2 Oct
Pacific-slope Flycatcher	848	15 Jul	15 Aug	8 Sep	23 Sep	13 Oct
House Wren	6	29 Jul	-	18 Aug	-	8 Sep
Swainson's Thrush	80	25 Aug	9 Sep	27 Sep	13 Oct	29 Oct
Warbling Vireo	15	8 Jul	15 Jul	31 Aug	22 Sep	26 Sep
Orange-crowned Warbler	59	13 Jul	27 Aug	24 Sep	24 Oct	8 Nov
Yellow Warbler	166	17 Aug	27 Aug	16 Sep	30 Sep	24 Oct
Wilson's Warbler	38	1 Jul	25 Aug	19 Sep	26 Sep	22 Oct
Western Tanager	3	25 Jul	-	1 Sep	-	17 Sep

We had another dynamite fall for migrating **Pacific-slope Flycatchers** (PSFL). Our banding total of 848 was 20% higher than 1992's record pace! The median passage date was slightly late (four days) compared to previous years, while the extent of migration, based on the 10th to 90th percentile dates, was shorter than usual, taking about 37 days compared to the mean of 42 days from previous years.

Yellow Warblers (YWAR) were our second most common migrant this past fall, as is typical in most years. Our total of 166 birds banded was fairly normal. The median passage date was normal as was the passage duration. **Swainson's Thrush** (SWTH) was our third most common migrant, and its passage dates and duration were fairly typical.

Fourth on our list of common fall migrants was **Orange-crowned Warbler**

Table 2. 1993 Departure and Arrival Dates

Species	Arrival Date	Departure Date	Comments
Black-chinned Hummingbird	-	30 Sep	
Allen's Hummingbird	-	31 Jul	Earliest departure
Winter Wren	2 Sep	-	
Golden-crowned Kinglet	28 Oct	-	First since 1990
Ruby-crowned Kinglet	8 Sep	-	Earliest arrival
Hermit Thrush	13 Sep	-	
Varied Thrush	17 Oct	-	
Myrtle Warbler	24 Sep	-	
Audubon's Warbler	20 Sep	-	
Black-headed Grosbeak	-	29 Sep	Late departure
Savannah Sparrow	18 Aug	-	Low numbers
Fox Sparrow	8 Sep	-	Low numbers
Lincoln's Sparrow	8 Sep	-	
Golden-crowned Sparrow	20 Sep	-	Low numbers
Puget Sound White-crowned Sparrow	13 Sep	-	
Gambel's White-crowned Sparrow	21 Sep	-	Low numbers
Dark-eyed Junco	24 Sep	-	Low numbers
Northern Oriole	-	15 Jul	Earliest departure

Western Banding Summary 1992

by Chris Otahal

The July-September issue of the *North American Bird Bander* summarizes the activities of banders throughout the western United States (AK, AZ, NM, CA, HI, ID, MT, NV, OR, WA, WA, WY, CO, and UT), western Canada (AB, BC, and NWT), and Mexico. This summary has been prepared by CCRS staff for the last five years in order to facilitate communication among the banders of this region. This year's summary again shows the leadership role CCRS is playing in banding operations in the West. Of the 245 banders responding to this annual survey, CCRS ranked number two in number of species banded (115), and number three in total bandings (8,793 birds). A total of 185,229 birds of 444 species were banded by the 245 participants responding to the survey. Table 1 lists those species for which CCRS ranked among the three highest banders in the west. This impressive list illustrates the important contribution CCRS is making toward our understanding of Western birds.

Table 1. How CCRS Ranked In 1992

Data From WBBA Annual Report

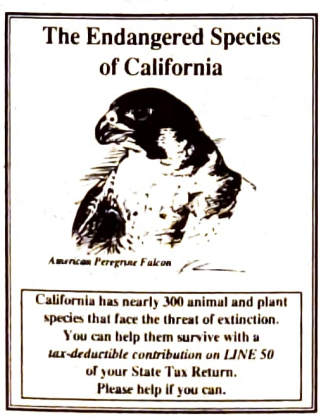
Species	Total Banded in Western US	Banded at CCRS	Percent CCRS	CCRS Rank
Tricolored Blackbird	26	26	100.0	1
Marsh Wren	269	255	94.8	1
Puget Sound White-crowned Sparrow	745	465	62.4	1
Black Phoebe	179	95	53.1	1
Western Flycatcher	1502	775	51.6	1
Northern Parula	2	1	50.0	1
Flicker Intergrade	2	1	50.0	1
Northern Mockingbird	144	71	49.3	1
Allen's Hummingbird	137	67	48.9	1
Bullock's Oriole	168	79	47.0	1
Belted Kingfisher	9	4	44.4	1
Hermit Thrush	811	293	36.1	2
Common Yellowthroat	716	253	35.3	1
Audubon's Warbler	2673	847	31.7	1
Anna's Hummingbird	828	259	31.3	2
Golden-crowned Sparrow	1057	305	28.9	1
Western Meadowlark	29	8	27.6	1
Fox Sparrow	478	124	25.9	1
Nuttall's Woodpecker	12	3	25.0	3
Worm-eating Warbler	4	1	25.0	2
Song Sparrow	1829	457	25.0	1
Lesser Goldfinch	312	76	24.4	1
American Goldfinch	1453	343	23.6	2
Lincoln's Sparrow	1515	350	23.1	2
Burrowing Owl	150	34	22.7	2
Common Bushtit	578	129	22.3	1
Yellow Warbler	1055	235	22.3	1
Ash-throated Flycatcher	79	17	21.5	1
European Starling	171	36	21.1	2
Myrtle Warbler	13400	243	18.7	2
Barn Swallow	152	28	18.4	2
Plain Titmouse	125	23	18.4	3
Hooded Warbler	23	4	17.4	2
Downy Woodpecker	133	23	17.3	3
Killdeer	94	16	17.0	2
House Finch	6082	909	14.9	2
Swainson's Thrush	1681	234	13.9	2
Northern Rough-winged Swallow	16	2	12.5	3
Gambel's White-crowned Sparrow	3204	386	12.0	2
Red-shafted Flicker	89	10	11.2	3
Brown Towhee	287	31	10.8	3
Willow Flycatcher	483	52	10.8	3
Red-winged Blackbird	1000	103	10.3	3
Virginia's Warbler	10	1	10.0	2
Chestnut-sided Warbler	11	1	9.1	3
White-throated Sparrow	77	7	9.1	2
Western Sandpiper	346	25	7.2	3
Bewick's Wren	299	21	7.0	3
Brown-headed Cowbird	471	31	6.6	2
Winter Wren	255	16	6.3	3
Black-chinned Hummingbird	1127	64	5.7	3
American Avocet	1380	50	3.6	3
Red-shouldered Hawk	121	4	3.3	3
Red-necked Phalarope	51	1	2.0	3

California's Endangered Species: You Can Help Them at Tax Time

Question: What's good about tax time?

Answer: A (tax-deductible!) chance to help California's endangered species survive.

Yes, there is actually something to smile about at tax time. It's LINE 50 on your state tax form—the "Rare and Endangered Species Preservation Program." A LINE 50 donation is your opportunity to help California's species-at-risk.



Pressures from an expanding human population, habitat loss and pollution have pushed 287 of California's native plant and animal species to the brink of extinction. Hundreds more may meet the criteria for listing.

Thanks, in part, to LINE 50 donations, there have been some recent success stories. According to the California Department of Fish and Game:

- Populations of **Belding's Savannah Sparrows, California** and **Light-footed Clapper Rails,** and **Least Terns** are rebounding, thanks to programs that remove non-native predators.
- A drought relief project at Ellicot Pond in Santa Cruz County reached its goal of providing enough water to allow the **Santa**

Continued on back cover

Humane Society Records

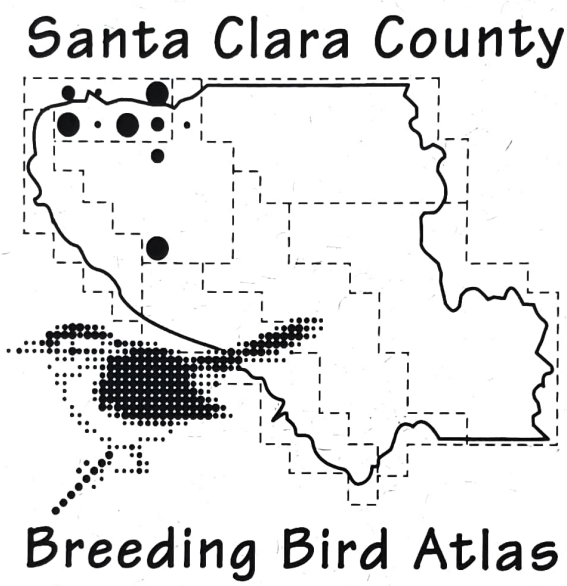
by Michael M. Rogers

Not all breeding confirmations come to the Santa Clara County Breeding Bird Atlas project by way of binoculars and field work. Ann Verdi has spent countless hours poring over the records of the Humane Society Wildlife Department, singling out records of interest, and locating the block and coordinate of each record location. This has resulted in about 180 records for the atlas project, nearly all of them confirmations of breeding.

The Humane Society files contain information about birds that have been reported to them and picked up for rehabilitation. In many instances these birds are recently fledged young that are "incapable of sustained flight," and therefore constitute confirmations of breeding. Of course these records come from where people are; in terms of our atlas jargon they are almost entirely from "Region 4," the urban portion of Santa Clara County. One might think that all the Humane Society could offer from such an urban area would be records of Northern Mockingbirds, Brewer's Blackbirds, House Finches, and House Sparrows, species which have already been confirmed in most Region 4 blocks. Indeed, there are plenty such records, but Ann concentrated on the more unusual species. The 180 records she came up with for the years 1987 to 1992 are of great interest, many being new breeding confirmations for their respective blocks. Some even provided confirmations of species that had not been detected in the block by the atlasers covering them.

Perhaps the records of greatest value are the only confirmed breeding records for the atlas of **Vaux's Swift.** Unlike the more typical fledgling records, the Humane Society records for Vaux's Swift consist of "nest with young" records, (two from block 8520 and one from block 9520 in the Los Gatos/Saratoga area). These nests were found in chimneys, a breeding location used much more often by this bird's close relative, the Chimney Swift, than by the Vaux's Swift, which usually prefers a more natural nest location in a hollow tree. The nests with young are all from 1988, between June 28 and July 11.

Most atlasers spent very little time at night in their blocks, and this resulted in relatively few records of owls in the database (and even fewer owl breeding confirmations). Humane Society records contain several owl records: **Barn Owl** breeding confirmations in 10 blocks (including 3 nests with young); fledgling **Western Screech-Owl** records in four blocks; fledgling **Great Horned Owl** records in three blocks; a single **Burrowing Owl** nest with young; and a single **Northern Saw-whet Owl** record, indicating possible breeding.



Another shortcoming of our atlas field work is that it is heavily concentrated between April and July, during the peak of the breeding season. The Humane Society works all year, and several interesting early and late breeding records are in their files. Fledgling **Cooper's Hawks** were found both early and late in 1992, with a fledgling found in Campbell on March 25 and another at Stevens Creek County Park on August 4. Both **Rock** and **Mourning Doves** have extended breeding seasons, and this is reflected in the Humane Society records. Rock Dove records begin with a nest with eggs on March 3 and continue through fledglings on August 15. Mourning Dove fledgling records span March 25 through August 29. One of the above-noted Western Screech-Owl fledglings was found on August 9 and one of the Great Horned Owl young on August 10. **Anna's Hummingbirds** account for the largest fraction of all the 180 records, with 23 breeding confirmations, including three nests with eggs, two nests with young, and 18 fledgling records. The earliest nest record is from January 20 and there is a fledgling record from January 29. There is also a single February fledgling record and eleven March confirmations; the latest record is of a fledgling on July 1. Twenty-one records of **Brown-headed Cowbird** fledglings is good for the atlas, although somewhat depressing. Seven of these were from August (through August 10) and seven more were from July—this species is clearly still busy until the last possible hosts have finished breeding. Other interesting August fledglings include **Hairy Woodpecker, Olive-sided Flycatcher, Western Tanager, Hooded Oriole,** and two records of **Lesser Goldfinch.**

Besides late and early records, there are many other breeding confirmations of our more unusual birds, including young **Green Herons** at two locations, 17 confirmations of **American Kestrel,** and a **White-throated Swift** nest with young in a Moffett Field hangar. The presence of a **Virginia Rail** at Vasona County Park on June 24 indicates possible breeding of this scarce breeding bird.

The use of Humane Society data in a breeding bird atlas project is not unprecedented. All three of the Western Screech-Owl breeding confirmations in "The Marin County Breeding Bird Atlas" were not the result of field work, but of examining California Center for Wildlife records years after the fact. However, presumably because of the time required, a more complete examination of these records for other interesting confirmations was not undertaken. Thanks again to Ann Verdi for the numerous hours of work dedicated to such a complete examination of the Humane Society records. Her efforts have clearly resulted in an invaluable addition to our atlas project!

The Birds of Santa Clara County

Continued from page 3

in the southern part of the state. Sibley (1952) considered them to be a fairly common summer resident and migrant. They now are a rare wintering bird, as shown in Figure 10, where I graph the records since 1980. They become more common in the summer, and we probably have some increase in numbers due to migrants in the spring and fall. Whether our wintering birds are permanent residents or birds that have moved in from somewhere else is unclear. Figure 11 shows the number of sightings per year from 1980 to the present. I don't know whether the buildup in numbers to 1989 is representative of local populations or an artifact of the reporting system.

The Green Heron is a regular nesting species in the county, and is definitely more common along streams and waterways in the southeast part of the county and even along suitable streams and ponds in the Diablo Range. Despite its regular presence in the northeastern corner of the county, no breeding records were obtained from this area for the period of the Santa Clara County Breeding Bird Atlas 1987 to 1993. The species does not appear unusually shy, as it has on occasion nested within housing developments (much to the distress of people who do not like half-eaten frogs on their lawns), with a suitable stream habitat nearby for foraging.

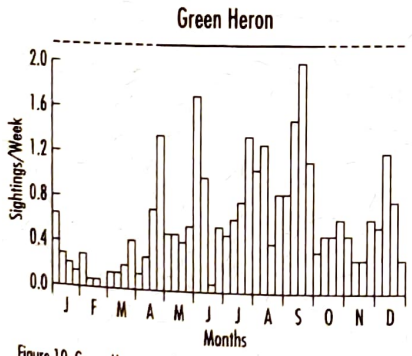


Figure 10. Green Heron yearly distribution in sightings/week (1980-93).

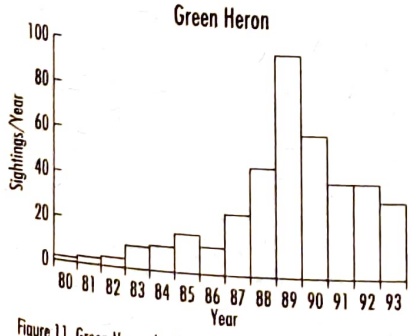


Figure 11. Green Heron distribution, 1980-93, in sightings/year.

The Black-crowned Night Heron is the fourth of our common resident herons and shows no seasonal movement. Sibley (1952) considered it a fairly common resident in the South Bay. Emily Smith counted 27 in Alviso on 11 Jul 54 (AFN 8:359) and considered this noteworthy, which suggests that the species was substantially less common than today. This species has nested irregularly in the South Bay in the first part of this century, but no colonies were known in the early 1950s (Sibley, 1952). Swarth reported 150 pairs at the Alviso heronry 18 Apr 80 (AB 34:811) and noted "The number nesting at this site continues to grow each year."

At the time of Sibley's mimeo notes there was only one record of White-faced Ibis for the South Bay, a single bird at Irvington on 18 May 23 (Sibley, 1952). The first record in Santa Clara County was of a single bird in the Palo Alto Flood Control Basin 2-17 Jun 77 (Bill Bousman; AB 31:1183).

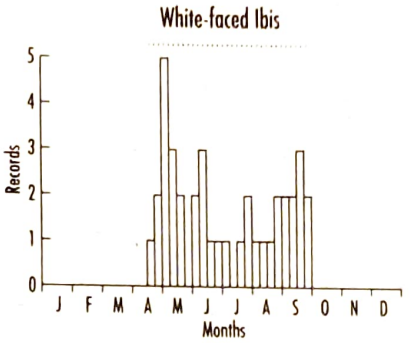


Figure 12. White-faced Ibis yearly distribution in records (1977-93).

This species has occurred more frequently and in larger numbers in recent years, although it is still considered very rare. I show the distribution of records since 1977 for this species in Figure 12. For the last two summers a few birds have remained in the vicinity of the Alviso heronry, and on one occasion were seen carrying nesting material. Whether they have ever progressed beyond an early courtship stage is unknown.

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Donations Help CCRS Programs

CCRS volunteers and staff would like to thank **Jerry** and **Elsie Richey** for their generous donation of a charter subscription to the new serial publication, **Birds of North America.** This important reference will assist us in researching current topics in ornithology as they relate to species being studied at CCRS.

Thanks also to **Dr. Patrick O'Brien** of **Chevron** for arranging a corporate donation to CCRS.

Due to the generous contribution of Board Member **David Blau** and the design efforts of **Les Chibana,** CCRS will soon have window stickers available. A black and white version of this sticker appears in the masthead of this issue of *RiparianNews*.

Donations to the Robert Hess Memorial Fund were used to purchase a portable electronic balance for our "mobile banding kit." This kit is now being employed by volunteers and staff, led by Rita Colwell, on a study of Rufous Hummingbird migration in the hills above Cupertino. Thanks to all of you who made such generous contributions to CCRS programs.

Peter Folan Remembered

by Marilyn Fowler

We were saddened by the sudden death of our old friend Peter Folan on December 16, 1993. Peter began working with birds when he was a member of Mike Rigney's adult education bird class more than twenty years ago. The class continued as a working group, and Pete learned to census breeding avocets and stilts, help with banding of herons and egrets on Bair Island, and build artificial nesting sites for California Least Terns. Later, with encouragement from Station founder Dr. Richard Mewaldt, he learned to band birds at CCRS and was part of the regular "Thursday Crew" for many years. We at CCRS, and the birds, have lost a good friend and supporter. We will miss Peter, and extend our deepest sympathy to his family.

Director's Note: We have established a memorial fund in Peter's name which will help defray the costs of mist net purchase. Anyone wishing to contribute to this fund is encouraged to do so by making the check payable to CCRS with a memo indicating "Peter Folan Memorial Fund."

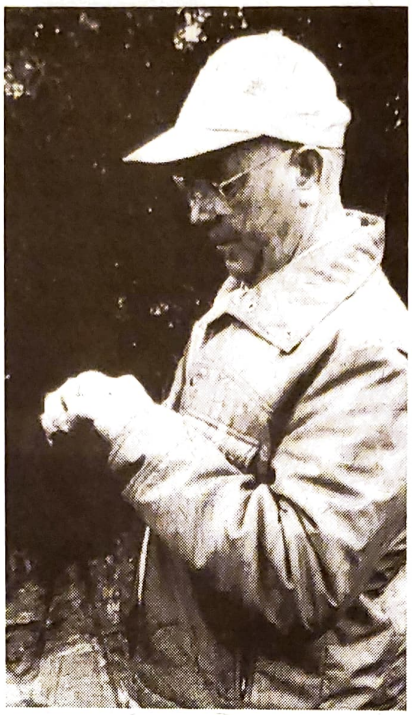

Photo by David B. Johnson

Help for Endangered Species at Tax Time

Continued from page 9

Cruz long-toed Salamander to reach the adult stage.

And there are many more! These successes have been hard won. With more than 30 million people placing demands on California's natural resources, recovery efforts are increasingly expensive. At the same time funding sources are shrinking. Many endangered species recovery programs depend on the generosity of California taxpayers.

Last year more than 100,000 California taxpayers donated to LINE 50. The average amount was just over six dollars.

Can you spare six dollars for California's endangered species? Think of it as a bright spot this tax season for you, and a chance at survival for nearly 300 of California's species-at-risk.

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Coyote Creek Riparian Station (CCRS) is a nonprofit California membership corporation with United States and California tax exempt status. CCRS is dedicated to research on and the restoration of riparian and wetland habitats.

CCRS operates in cooperation with the Santa Clara Valley Water District, San Jose/Santa Clara Water Pollution Control Plant, U.S. Fish and Wildlife Service, California Department of Fish and Game, and the San Francisco Bay National Wildlife Refuge.

RiparianNews is published quarterly for the information of our CCRS membership; the personnel of the several cooperating federal, state, and local agencies; and other organizations and individuals concerned with the flora and fauna of riparian and wetland habitats. Design and layout courtesy of Aplin, Uno & Chibana, Mountain View, CA.

New Members

We welcome the following new members:

Deke & Peggy Descoteaux
Mark Feifarek
Lawrence Gonzales
John Mariani
Carol McCarthy
Del Miles
Robert Moncrieff
David Poeschel
Robert & Vada Stitt

CCRS Membership

Member	$20 annually
Senior or Student	$15 annually
Family	$25 annually
Supporting	$35 annually
Sustaining	$90 annually
Corporate	$500 annually
Life	$600*
Patron	$3,000*

* Life and Patron categories can be single payments or 4 quarterly installments.

Life membership payments and 10% of all other membership payments and general contributions go toward long-term support of CCRS activities. We acknowledge memorial contributions in *RiparianNews*. We welcome bequests including those of real property.