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# RipariaNews

Spring/Summer 1998

Newsletter of the Coyote Creek Riparian Station

Volume 13, No. 2 & 3



## THANKS NEIL!!!!

Well, the rumors are true. Our fearless leader is leaving us. After a two-year battle, Neil Pelkey has brought us out of major debt, beefed up our technical capabilities, improved our programs, and lived to tell about it. With long hours (including many miles driven between here and Davis), determination, and a flair for drama, Neil really pulled us all together and brought us to a higher level of professionalism and scientific research. The staff at CCRS would like to thank him for putting up with our colorful personalities and off-the-wall humor. He was always very supportive of our wishes to move in new directions and helped us gain many diverse skills. Neil, we wish you the best of luck teaching, tracking tiger scat, with your conspiracy theories, and whatever other adventures you find yourself in. The new Director is going to have some pretty big shoes (and shorts and Hawaiian shirts) to fill. Don't forget to come back and fix our computers!

*-The Staff*

When I was asked to offer some comments about Neil Pelkey on behalf of the Board of Directors for this newsletter, it was with a mixture of pleasure and regret that I accepted. Pleasure because it is delightful to reflect on the changes Neil has brought to CCRS and regret because it is time to acknowledge that Neil's all too brief tenure is coming to a close. When I joined the Board at the annual meeting in October 1996, Neil spoke briefly about his expectations. He expected the staff, board, and volunteers to focus on membership involvement, community outreach, professional research, and publications, and he expected to work with all of us to restore a sound financial foundation for CCRS. He also said he expected we should all have fun along the way. Thanks to Neil's enthusiastic leadership, unfailing cheerfulness, and endless energy we have made tremendous strides toward meeting all of those expectations. The Board joins me in saying "Thanks, Neil, for exceptional efforts during some trying circumstances, thanks for offering creative solutions when we needed to redirect our efforts, and

thanks for making sure we had fun along the way. We will miss you and we wish you well."



*-Trish Mulvey*



# DIRECTOR'S REPORT

## by Neil Pelkey

To CCRS supporters, friends, and coworkers,

Well, it has been an interesting two years at CCRS. I am older, grayer, and have a better understanding of the Bay Area ecosystems and politics than I ever thought I would have. During the last two years, I have been given much hope for the future of the Bay Area and the future of the planet. That hope has come from the many fine people who have supported CCRS with their time, their effort, and their money. With that help we have been able to become more heavily involved in the decision making that is occurring on many fronts that impact the Bay Area's environmental health. We have also been able to gain a greater understanding of some of the processes that determine how valuable the remaining habitat is to our nonhuman neighbors.

The hard work and struggle have been well worth it. I am taking that knowledge with me to continue my work in India on the importance of watershed groups. I will be applying some of the lessons we have learned on monitoring and watershed health in the Kalvarain Hills region of India and in the Kalakad-Mundanthurai Tiger Reserve. The effects of watershed failure in these regions are pretty catastrophic—crop failure and hunger can be very immediate.

I will also be studying which watershed groups work and why they work on an EPA NSF-funded project through U.C.-Davis. Finally, I will still be putting in some time here at CCRS to keep the growth in the scientific, research, and watershed GIS work that we are doing. So you will all see me around from time to time.

The new managing director is Eddie Gilmartin—a colleague from U.C. Davis. He is an aquatic scientist with a solid background in project management. He is also one heck of a nice guy. I am convinced that he will take CCRS to the next level in terms of understanding and protecting our creekside habitats. He will bring a much needed understanding of the limnic system to CCRS. I hope that you all will give Eddie the kind of support and joy I have had here.

It has truly been my honor to work with such a fine staff, such a committed board, and such a supportive membership. 🍃

(Correction: In the last issue, the source for rainfall data should have read: Neal Van Keuren of the City of San Jose.)

The Coyote Creek Riparian Station would like to extend our sincere thanks to the following companies and organizations for donating funds and/or equipment to CCRS. We couldn't survive without the help and support our programs receive from these members of the community. *Thank you very much for your gifts!*

**TerraNOVA International**

**Jerry Hearn and the San Mateo County Fish and Game Commission**

**Trimble Navigation, Limited**



**The Mission Peak Company**

**IBM Corporate Community Relations**



**Conservation Technology Support Program (Hewlett Packard and Environmental Systems Research Institute)**

*Thank You!!*





# NOTES FROM THE FIELD - MIGRATORY DRAGONFLIES

by Alvaro Jaramillo

Many of you are aware that the Monarch Butterfly is highly migratory. East of the Rocky Mountains, the Monarchs from as far north as Canada make a long southward journey during the fall to winter in massive groups in the highlands of central Mexico. West of the continental divide, the Monarch Butterflies winter in smaller groups in scattered locations, mainly on the California coast. This is perhaps the best-known migratory butterfly, but it is not the only one. Many other species perform regular, as well as irregular, movements. The Painted Lady and its close relatives are prone to making massive incursions north of their regular breeding range. These may not necessarily be considered true migrations since they don't happen in all years, and in many cases the butterflies hatched in the north do not come back to the south.

What is even less well known is that other insects, such as dragonflies, also perform migrations and irregular movements. The Green Darner is a wonderful example of a migrant dragonfly. Green Darners are large dragonflies in which the male has a green thorax and a blue abdomen. They are common in the Bay Area. In the northeastern part of the continent, the Green Darner arrives from southern wintering grounds in late April or early May and begins to mate and lay eggs immediately. The eggs and larvae develop rapidly during the summer and reach the mature stage during August and September. I should point out that dragonfly and damselfly larvae (immatures) live under water; only the adults have wings and live out of the water. Once mature, they begin to head south, migrating in massive numbers, particularly during a north wind, and concentrating on lake shores and coasts much in the same way as migrant birds and butterflies do. Notably, one of the most voracious predators of migrant Green Darners along the Atlantic Coast is the Merlin, which is a small falcon. Some have even wondered if the migration of the Merlin is not timed to coincide with the migrant dragonflies. The offspring of these southbound Green Darners are the ones which move north in spring and begin the cycle once more. What is intriguing is that there is another kind of Green Darner that does not migrate. This form emerges as an adult in June and July, breeds, and the larvae winter in the same ponds, emerging the next summer as adults. The two forms do not overlap in their period of mating and therefore are reproductively isolated from each other, as are true biological species. They also have vastly different development times, and differences in the number of broods per year.



However, they are physically the same; one cannot differentiate one type from the other unless behavior is considered. It appears that most, if not all, Green Darners in California are the resident types, not the migratory ones, but this is not all that clear. I have observed Green Darners at CCRS and San Mateo county that appeared to be migrants based on their behavior.

Another migratory, or at least irruptive, species is the Variegated Meadowhawk, a small red and grey dragonfly frequently observed foraging over parched, dry grasslands. Their movements can be immense and impressive, but they may not qualify as a proper migration. The problem is that they are often observed flying south in the fall, but are seldom observed flying north in the spring. A proper migration involves both a southward and a northward component, but it is possible that the northbound migrations have not been noted due to lack of observers familiar with the problem. Only once have I observed a northbound migration of this species in Half Moon Bay during a spell of very warm south

winds early in the spring. In Oregon, southbound passage tends to occur between late August and late September, however the large southbound movement I observed last fall in Half Moon Bay occurred on October 14, so more likely than not these movements occur later on in the season in the south. During this day I was able to make counts of Variegated Meadowhawks. Roughly sampling a swath 30 feet long and 10 feet high, I counted up to 400 dragonflies moving through in 5 minutes! Considering that the migration was occurring for miles along the coast (I received confirmation that they were migrating over El Granada, to the north of where I was) and the fact that the movement lasted for the better part of the day, one can get the idea that millions and millions of dragonflies moved along the San Mateo coast on that day. Curiously, in Oregon it has been noted that seldom are the migratory movements obvious more than a few miles from shore. When I observed the meadowhawks, they were coming off the ocean perhaps having been pushed out by the northeast wind - east winds tend to be associated with meadowhawk migrations. Peter Pyle has mentioned to me that they regularly observe 'invasions' of a small dragonfly on the Farallon Islands; almost certainly these are moving Variegated Meadowhawks.

Last October I noticed that thousands of these dragonflies were getting killed along Highway 1 by cars. On one side of the highway, within 100 feet, I was able to find 89 recently killed Variegated Meadowhawks; 50 were males and 39 were females; confirming that both sexes are involved in these mass movements and they are roughly equally represented. Interestingly, in many cases the dragonflies are accompanied by lesser numbers of migratory butterflies such as Painted Ladies, or, in the

*Continued on Page 4*



October Half Moon Bay movement, Buckeye butterflies. What was most amazing was that in the October flight I was able to see large numbers of black-colored flies coming onshore with the dragonflies; it's difficult to fathom it but perhaps these were a species of migratory fly! Whatever is concentrating the dragonflies is also concentrating the other insects. As I mentioned above, east winds and sometimes high temperatures trigger these events. In most cases the dragonflies are observed flying south, southeast, or east. Perhaps what is occurring is that this species migrates southbound over such a wide area, that movements are not easily perceptible. Only when there is an east wind do the migrant dragonflies become pushed towards the coast, concentrating them in large numbers as they struggle from getting pushed offshore.

At CCRS, the Variegated Meadowhawk varies in abundance, being largely absent for most of the year, but is present in the late summer and fall. These may in fact be migrants using the site much in the same way that the migrant birds do. The small numbers we observe do not allow us to confirm that this is the case. At this point all we can do is sit back, watch, and enjoy these movements. Our only understanding comes from trying to make links with weather, timing, and location to explain these movements. This is what the early naturalists had to work with when trying to understand what the migrating birds were doing. This was before we could band them, track them with satellites, find out where they were going, confirm that it was a widespread phenomenon, etc. Maybe one day there will be a transmitter small enough to fit on a dragonfly, maybe one day we at CCRS will be banding dragonflies to try to understand what they are doing, but until that day comes we will keep working on the birds. We still have so much to discover about them.

Thanks to the Oregon Dragonfly and Damselfly Survey migration page on the WWW ([http://www.skipnet.com/~ore\\_dfly/migrate.htm](http://www.skipnet.com/~ore_dfly/migrate.htm)), a great and useful resource. ♣



## Meet Our New Board Member and Staff Members!

### P. Kay Whitlock, Board Member

Kay Whitlock became a CCRS Board Member in October 1997 at the Station's annual meeting. Ms. Whitlock serves as Assistant General Manager of the Santa Clara Valley Water District. As Assistant General Manager, Ms. Whitlock represents the District's interest in external activities, including legislation and related state and federal policy development.

Ms. Whitlock received a Bachelor of Science degree in Agricultural Engineering and a Master of Arts in Environments and People from the University of Illinois. She is a Registered Professional Engineer and a member of the American Society of Civil Engineers, American Public Works Association, and the American Society of Agricultural Engineers. Recently she received the honor of being selected by President Clinton to sit on the American Heritage Rivers Initiative Advisory Committee.

### Sky Harrison, GIS Specialist

Sky Harrison received a Bachelor of Science degree from the University of California at Davis in Environmental Policy Analysis and Planning, with a minor in Geographic Information Systems, in December 1997. Sky began his position at CCRS in January 1998. His duties include data acquisition, processing, and management as well as map output. He is dedicated to the growth and development of the GIS program.

### D'Arcy Nicola, Office Manager

D'Arcy Nicola began her part-time position as Bookkeeper for CCRS in February 1998 while also working at an alternative private school. Recently D'Arcy became our full-time Office Manager. Now, she not only helps with the accounting, but she is also responsible for volunteer coordinating as well as other office duties. D'Arcy has been working diligently with Don Price, our Accountant, to close the 1997 books. ♣

### Upcoming Issue

In the next issue we will be profiling our second-longest banders, Tom Goodier and Irene Beardsley.



# BANDING SUMMARY FOR 1997

by Alvaro Jaramillo

Another year of banding has come to an end, this one being the 16th banding season at our current study site. This summary deals almost exclusively with the banding we conducted at our principal banding site here on lower Coyote Creek. However, banders associated with CCRS do band in other areas. These non-Coyote Creek bandings are listed in Table 1. At CCRS we processed a total of 7,491 birds, of which 5,136 were newly captured individuals and 2,355 were re-captured birds previously banded at CCRS (Table 2). We captured a total of 79 species in 1997. The number of first captures is roughly average, while the number of re-captured birds is perhaps a little lower than the average (Figure 1). To illustrate the busy times and slack times for banding at CCRS, I have plotted the number of both birds and species we processed by month in 1997 (Figure 2). Since the number of days we open nets differs between months, I standardized by plotting the number of birds caught per 100 net hours. A net hour is a measure of effort equivalent to having one of our standard mist nets open for one hour of time. The number of species caught cannot be easily standardized for the netting effort, so the raw totals are plotted in Figure 2. What you will notice is that in the fall we band the most individuals and the most species, in fact during the spring we do not catch a very high number of birds at all. On the other hand, in spring we do catch more species than in the summer or winter months (Figure 2). Thus, spring is not numbers rich but it is species diverse. In fall, the species we catch are diverse, and we catch many birds.

Of the 79 species processed, the most abundant species were (in decreasing order), Western Flycatcher, House Finch, Puget Sound White-crowned Sparrow, Golden-crowned Sparrow, Song Sparrow, Hermit Thrush, Audubon's Warbler, Common Yellowthroat, and Swainson's Thrush (Table 2). These ten species accounted for just over 58% of all individuals processed during 1997. Some of you may be confused by some of the species names we are using, particularly since many do not appear in the standard field guides. In many cases we are able to identify some subspecies, such as the "Audubon's" form of the Yellow-rumped Warbler and the "Puget-sound" form of the White-crowned Sparrow, in the hand. Since these forms have an official Bird Banding Lab code, we identify and band them as such. The opposite occurs with the Pacific-slope Flycatcher, which cannot be reliably separated from the more eastern Cordilleran Flycatcher, and thus we use the inclusive name Western Flycatcher to refer to this species. We are almost certain that all Western Flycatchers caught at CCRS are Pacific-slope Flycatchers, but since we cannot be sure we are safer calling all of them Western Flycatchers. In the annual summary (Table 2) I have used quotes to refer to forms which are not proper species, such as the above-mentioned examples.

TABLE 1: Birds banded at locations other than CCRS during 1997.

SPECIES	NUMBER
American Kestrel	1
American Robin	5
Barn Owl	2
Burrowing Owl	85
Cassin's Finch	1
Cooper's Hawk	5
Dusky Flycatcher	7
Fox Sparrow	6
Golden-crowned Kinglet	3
Golden-crowned Sparrow	1
Great Horned Owl	3
Green-tailed Towhee	1
Lincoln's Sparrow	3
MacGillvray's Warbler	6
Nashville Warbler	2
Orange-crowned Warbler	12
Red-shafted Fiicker	1
Red-shouldered Hawk	4
Red-tailed Hawk	3
Short-eared Owl	1
Song Sparrow	4
Warbling Vireo	2
Wilson's Warbler	15
Yellow Warbler	4
<b>TOTAL</b>	<b>177</b>

Figures 3 and 4 show the top five species processed during the spring and fall migration, respectively. What is noticeable is that the top five spring species are not the same as the top fall species. Only the Golden-crowned Sparrow is found in both top five categories. Of the spring migrants the most abundant is the Swainson's Thrush. It is much less common in the fall, suggesting that Swainson's Thrushes take a different route southbound. The Western Flycatcher, on the other hand, is the most common fall migrant, and its numbers are much lower in the spring. Nearly all of the fall Western Flycatchers we band at CCRS are juveniles making their first southbound trip. Do most adults fly over and not stop, or do they take a different route than the juveniles? The answer to this question is still unknown.

As is always the case we did band some unusual birds this year. The Vesper Sparrow banded on October 5 by Tom Goodier was the first one for the station! Two Common Poorwills, one in September and one in October, were a good number, given that we had previously netted only 6 individuals of this species, the last record being from 1992. The Least Flycatcher netted on September 10 was the 11th we have caught. This is a

*Continued on Page 7*



TABLE 2

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	TOTAL
Sharp-shinned Hawk	1			1							2		4
Killdeer		1								1			1
Mourning Dove			1	3	1			1		1			7
Common Poorwill									1	1			2
Black-chinned Hummingbird				4	7	3	1	1	1				17
Anna's Hummingbird	4	5	4	6	12	18	8	17	11	10	3	1	99
Rufous Hummingbird			5	5	1			1					12
Allen's Hummingbird		2	1	2	6	7							18
Nuttall's Woodpecker					2	3		1	2		1		9
Downy Woodpecker		1	4	3	10	8	2	5	3	1			37
Red-shafted' Flicker	1	2	3							2			8
Flicker 'intergrade'	1										1		2
'Yellow-shafted' Flicker	1												1
Western Wood Pewee									1				1
Willow Flycatcher								9	38				47
Least Flycatcher									1				1
Hammond's Flycatcher										1			1
Western' Flycatcher			1	8	2	1	9	235	378	46	1	1	682
Ash-throated Flycatcher					3	1	1	2	2	1			10
Black Phoebe		4	8	4	28	48	19	23	21	9			164
Say's Phoebe										1			1
Tree Swallow			3										3
Northern Rough-winged Swallow						1							1
Cliff Swallow					2		1						3
Barn Swallow						4	2						6
Western Scrub-Jay	1		1	2	3	2		1	2	1		1	14
Chestnut-backed Chickadee	1	2	11	5	30	20	13	8	9	5	1	4	109
Bushtit	11	5	16	10	38	41	20	19	20	17	7	19	223
Bewick's Wren	2	5	3	4	3	15	7	9	13	6	1	3	71
House Wren		1				1	4	6	1	4			17
Winter Wren					2					3	1		6
Marsh Wren									2				2
Golden-crowned Kinglet		1	1										2
Ruby-crowned Kinglet	22	20	24	4					2	51	35	50	208
Blue-gray Gnatcatcher	1												1
Swainson's Thrush				2	235	20			53	19			329
Hermit Thrush	30	47	85	51	2			1	53	151	24	18	462
American Robin	3	12	1	5	2	1	3				1		28
Varied Thrush	4	11	8	1									24
Northern Mockingbird			13	10	9	28	9	34	8	4			115
Loggerhead Shrike						2		3					5
European Starling			1	1	1		1						4
Cassin's Vireo									1				1
Warbling Vireo					5				5	3			13
Orange-crowned Warbler	6	4	3	39	28	1	1	2	35	55	11	10	195
Nashville Warbler									1	2			3
Yellow Warbler					18	1		9	182	35			245
Myrtle' Warbler		76	38	18	1				7	21	4	2	167
Audubon's' Warbler		78	77	30	7				50	111	32	19	404
Black-throated Gray Warbler										1			1
American Restart									1				1
Ovenbird									1				1
McGillvray's Warbler					1				1				1
Common Yellowthroat		3	36	67	31	24	3	34	82	53	1	3	337
Wilson's Warbler			1	13	30		3	11	29	10			97



TABLE 2 CONT.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	TOTAL
Yellow-breasted Chat										1			1
Western Tanager					1				1	1			3
Black-headed Grosbeak				2	8	4	11	3	2				30
Lazuli Bunting					1		1	1					3
Spotted Towhee				1					1	1			3
California Towhee	2	2	6	5	6	4	8	2	4	5	1		45
Chipping Sparrow									1	1			2
Vesper Sparrow										1			1
Savannah Sparrow									5	2			7
Fox Sparrow	11	20	23	23	1				20	82	29	17	226
Song Sparrow	7	12	46	55	131	89	20	48	36	20	6		470
Lincoln's Sparrow	14	16	48	34					45	90	27	7	281
White-throated Sparrow											2	1	3
Golden-crowned Sparrow	11	39	75	71	3				49	173	61	16	498
'Gambell's' White-crowned Sparrow	1	11	22	8					50	120	49	9	270
'Puget Sound' White-crowned Sparrow	24	45	59	42					128	162	70	25	555
'Oregon' Junco			3	1							2		6
Brewer's Blackbird					1	1							2
Brown-headed Cowbird				4	11	3							18
Hooded Oriole						2		2					4
Bullock's Oriole				11	32	34	7	2	1				87
House Finch	13	10	2	4	21	106	144	249	18	29	24	5	625
Lesser Goldfinch				1		2		5	5	11	5		29
American Goldfinch		1	20	29	16	12		7	3				88
New Bandings	65	208	335	312	542	303	210	617	1205	1007	248	84	
Cumulative New Bandings	65	273	608	920	1462	1765	1975	2592	3797	4804	5052	5136	5136
Species Banded	23	28	35	40	41	32	24	31	49	45	27	19	
Cumulative Species Banded	23	33	41	48	58	62	62	63	73	78	79	79	79
Recaptures	107	228	318	277	210	204	88	134	189	319	154	127	
Cumulative Recaptures	107	335	653	930	1140	1344	1432	1566	1755	2074	2228	2355	2355
Days of Operation	6	11	23	29	31	29	13	31	29	30	11	11	
cumulative days of operation	6	17	40	69	100	129	142	173	202	232	243	254	254
Net hours	416	854	1633	1948	2078	1973	1027	2113	1948	2033	811	835	17665.8
TOTAL BANDINGS	172	436	653	589	752	507	298	751	1394	1326	402	211	7491

Continued from Page 5

very rare species in California, and our total appears to be overly high for one location. The Blue-gray Gnatcatcher caught on January 17 was only our fourth and a very unusual winter record; this species is a regular in the county during migration and the breeding season. The immature male American Redstart banded on September 4 was our fifth ever; this species is a vagrant from eastern North America. Another eastern vagrant was the Ovenbird banded on September 23, our sixth ever. This is a very high number of Ovenbirds at any one site, which is probably a reflection of their secretive nature. Ovenbirds are surely more adequately sampled by mist nets than observers in the field, accounting for their perceived rarity.

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It takes a lot of work to catch 7000 plus birds, we are gratefully indebted to our 1997 banders: Matthew Anderson, Michael Azevedo, Joyce Bartlett, Irene Beardsley, Bill Bilobran, Roberta Bischel, Joelle Buffa, Les Chibana, Sheila Covarrubias, Lynn Cropper, Mike Cropper, John Dutton, Gerry Ellis, Arleen Feng, Chris Fischer, Enid Fox, Lee Franks, Christina Garcia, Tom Goodier, Helen Green, Jennifer Hartle, Vicki Hoffman, Stephen Holtzclaw, Debie Kinsey, Marion Krause, Nick Lethaby, Kestral Mandras, Jennifer Matkin, Clyde Morris, Jane Orbuch, Doug Padley, Pamela Peterson, Tina Peterson, Jay Plater, Jerry Roe, Susan Sandstrom, Vicki Silvas-Young, Jerry Towner, Janis Waggener, and Zona Walcott. *Thank you for putting in the time!*

FIGURE 1. CCRS BANDING SUMMARY 1982-1997

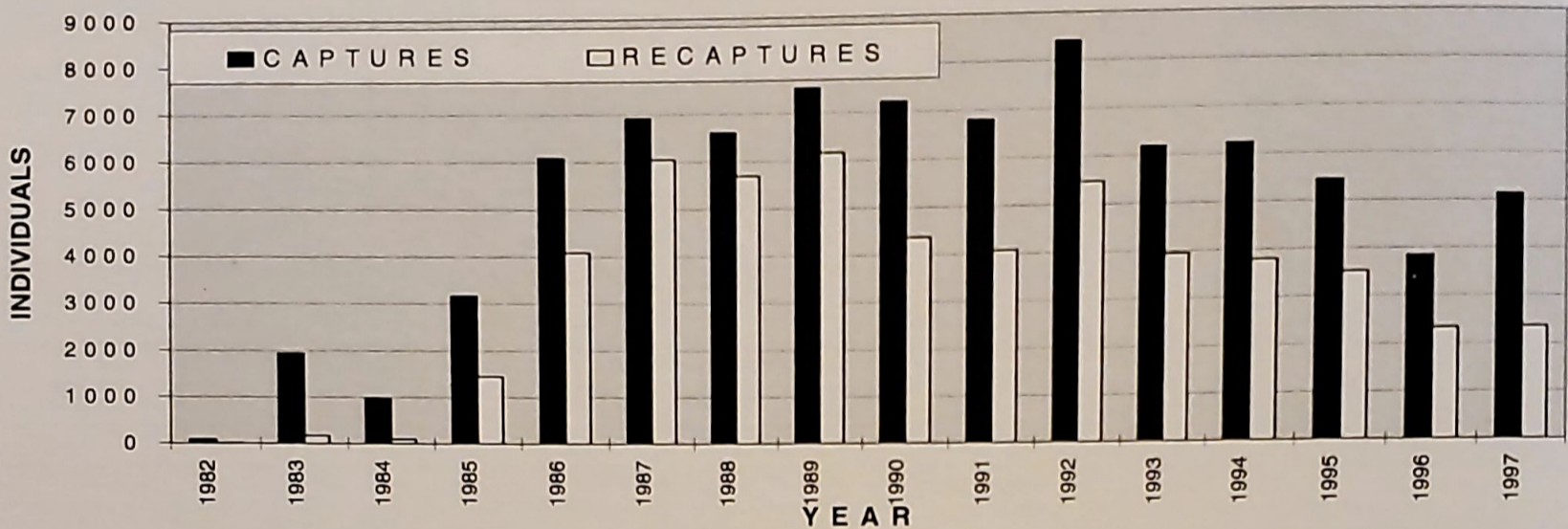


FIGURE 2. INDIVIDUALS AND SPECIES BANDED PER MONTH.

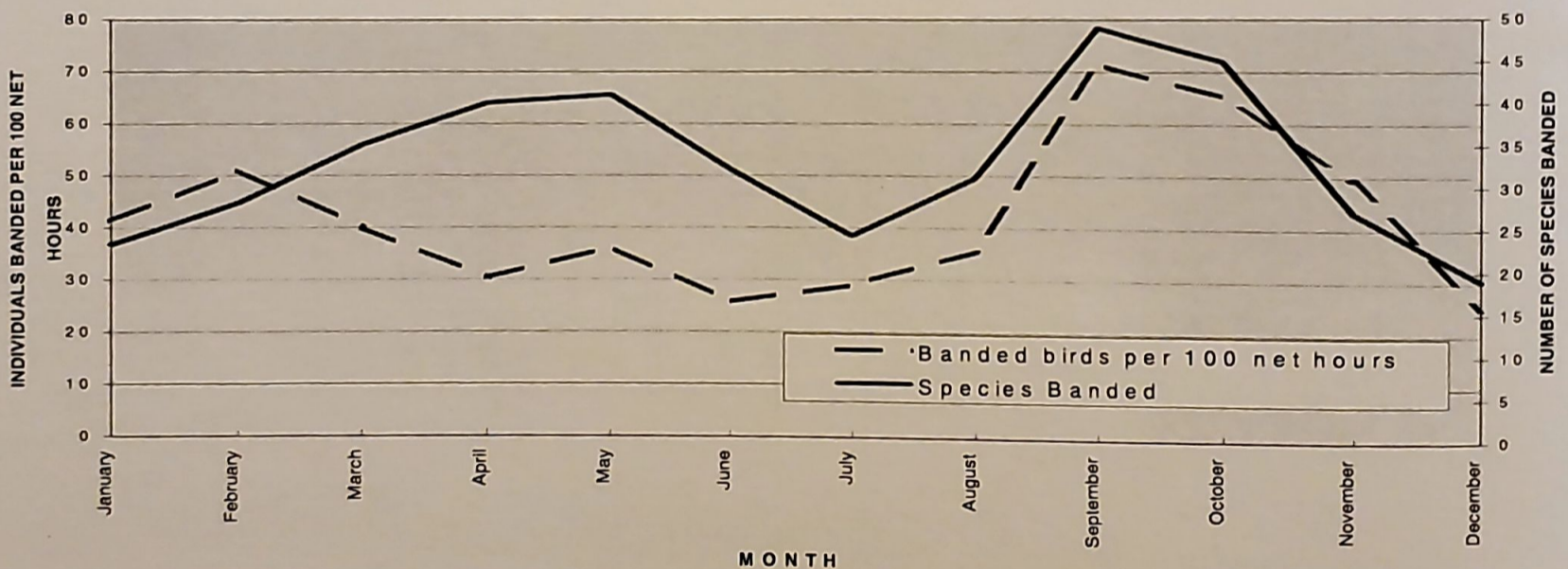


FIGURE 3 - TOP FIVE SPECIES PROCESSED IN SPRING.

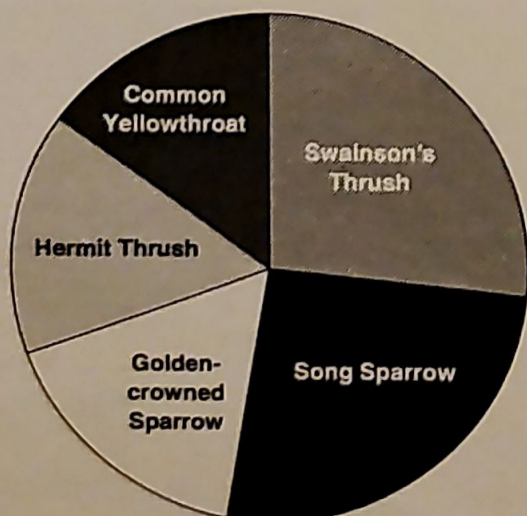
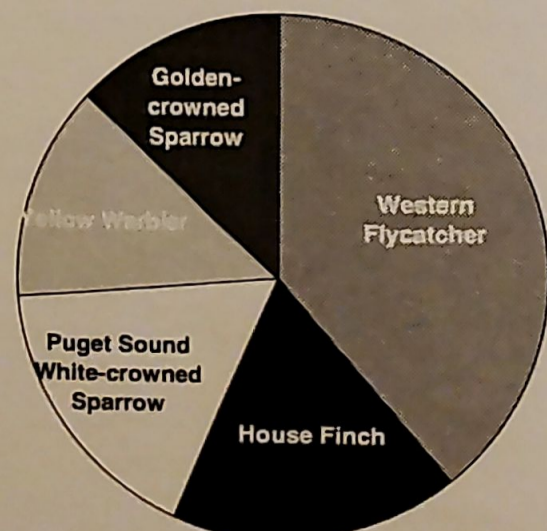


FIGURE 4 - TOP FIVE SPECIES PROCESSED IN FALL





# International Migratory Bird Day 1998

## Don Edwards San Francisco Bay National Wildlife Refuge

### Environmental Education Center

by Don Edwards San Francisco Bay National Wildlife Refuge and the Coyote Creek Riparian Station

On Saturday May 9, 1998, the Environmental Education Center partnered with the Coyote Creek Riparian Station (CCRS), the San Francisco Bay Wildlife Society, the Santa Clara Valley Urban Runoff Pollution Prevention Program, the Santa Clara Valley Audubon Society (SCVAS), and the San Francisco Bay Bird Observatory (SFBBO) to present a full-day program of events for International Migratory Bird Day (IMBD). Activities and presentations coordinated by the staffs of these organizations occurred at the Refuge's Environmental Education Center, Alviso Marina, and the Coyote Creek Riparian Station. The Refuge hosted the event and was the focus for informational booths, activities, and presentations. CCRS staff provided information on CCRS and hosted a field trip to the station.

There were many activities planned specifically for children. Ongoing throughout the day was a migration game in which participants began by making a Barn Swallow or Forster's Tern mask, then learned about their bird by following a migration route through the building. Along the way they wrote answers to questions about their bird - what it eats, what special adaptations it has, and obstacles it has to overcome in order to reach its migration destination. Participants were given an International Migratory Bird Day poster. Also ongoing throughout the day was a Burrowing Owl toss game, which was run by the Ohlone Audubon Society. At the end of the day was the Migratory Bird Poster Contest Award Ceremony. There were almost 200 participants in the poster contest. All poster contest participants present were given IMBD posters.

Chris Otahal, the Avian Research Director at CCRS, led a field trip to the Coyote Creek Riparian Station where he gave a banding demonstration to about twenty people and introduced them to some of our neotropical visitors. Some of these species included Yellow Warblers, Orange-crowned Warblers, and Swainson's Thrushes. Al Jaramillo, Wildlife Biologist at CCRS, led a bird walk in the overflow channel. Participants could also go birding on a field trip to the Alviso Slough.

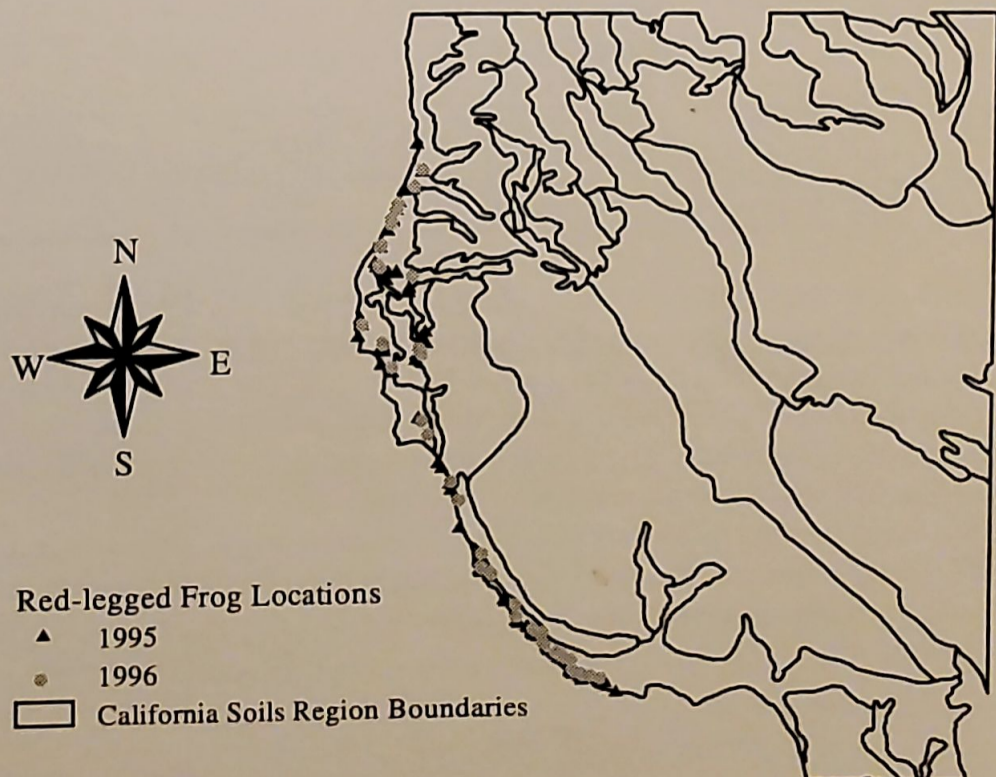
Thank you to the Don Edwards San Francisco Bay National Wildlife Refuge for providing shuttles for the field trips and to all the volunteers and organizations who made the day a success! ♣

## Frog Mapping Returns to CCRS

by Neil Pelkey

The map to the right shows the locations where our herpetology staff—Mike Westphal, Rich Seymour, and Diane Kodama—found the Federally listed threatened Red-legged Frogs in the 1995 and 1996 rainy seasons. We are going to use this data in combination with vegetation and physical factors to help determine where the prime frog habitat exists on the Central Coast. This is a very important project, so when you stop by CCRS take the time to look at the maps that will be on the walls in the Herpetology Office. This project is not funded, so any donations would be greatly appreciated.

### Red-legged Frog Locations on the Central Coast







# Banders Flock to the Anniversary Party!!!

by Diane Kodama

In 1982, Dick Mewaldt and a handful of volunteers began banding out of his van on a strip of land next to the lower Coyote Creek. With 1997 marking our fifteenth year at the same site, we felt that a celebration was in order to commemorate the success of the banding program and the dedication of everyone involved. The afternoon of January 31, 1998, began with a field trip to the Palo Alto Baylands and the Sunnyvale Pollution Control Plant led by Al Jaramillo. Species of note seen during the trip included a Bald Eagle, Burrowing Owls, and a special treat; 4 species of Rails (Virginia, Sora, Clapper, and Black)! As twilight approached, approximately 60 species of birds had been viewed and enjoyed by all. The night ended at Bill Bilobran's house with delicious food, good company, and much laughter and reminiscing over past years. Special thanks to Bill for being our potluck host and thank you everyone for making the celebration a success!



**Back row from left:** Al Jaramillo, Lynn Cropper, Jennifer Matkin, Les Chibana, Mike Cropper, Gerry Ellis, Pam Peterson, Clark Stone, Chris Otahal **Middle row from left:** Arleen Feng, Zona Walcott, Remy Lethaby, Susan Sandstrom, David Cook, Marilyn Fowler, Russ Fowler **Front row from left:** Bill Bilobran, Nick Lethaby, Vicki Silvas-Young, Irene Beardsley, Jan Peterson, Joyce Bartlett

## Many More Thanks!!

CCRS would like to thank the City of Cupertino Parks and Recreation Department, and especially Barbara Banfield, for providing laboratory space for our Saratoga Creek Macroinvertebrate Study at the McClellan Ranch Junior Nature Museum. We recently removed our samples from the Museum, and they will be archived elsewhere. Barbara graciously shared her workspace with us for three years, and our "invert" study could not have been accomplished without her generosity. Thanks, Barbara!

We would like to acknowledge those members who donated money so far this year to CCRS above and beyond their membership dues. This kind of unrestricted money allows CCRS to move in new directions and improve existing programs.

Irene Beardsley  
Mike Mammoser  
Margaret Caldwell  
Donald and Diethild Price  
Frank and Janice Delfino

Christopher Bloxson  
Victor Bravo  
Claire Wolfe  
Michele Nichols  
Jean Richmond





# Off the Wall by Alvaro Jaramillo

## Winter 97-98

During this winter season we were greatly hampered by El Niño. We do not band when it is raining consistently or in high wind, thus the winter's rain storms did not allow us to band on many occasions. In addition, during most of February the site was under water - we don't call it the overflow channel for nothing! Our typical winter banding schedule is to band on three days of each week. We came close to achieving this for December and January, but not February. In summary, we banded on 11 days in December, 11 days in January and only one day in February. The small number of banding days also led to a relatively small number of banded birds. During the winter season we processed 473 individuals of 25 species, including two additional identifiable forms of Yellow-rumped Warbler and White-crowned Sparrow, which we record as 'species' for banding purposes. This is markedly less than our average for the last four winters, which is approximately 1100 individuals per winter. This great decrease is without a doubt related to the fewer number of days when we were able to band this year. Also, we did no trapping, which resulted in high numbers in the past.

Even in a normal winter, this season is the slowest one. There is no migration, and fewer species are present than in other times of the year, so we seldom catch any odd species. However, during this winter we were lucky enough to catch a Swamp Sparrow. This is only the fourth individual we have ever banded and the first caught during the winter season. The Swamp Sparrow was netted on January 18, 1998, and was deemed to be in its second calendar year, hence a bird hatched in the summer of 1997. Also unusual was a Western Flycatcher (most likely a Pacific Slope Flycatcher, but since we cannot be sure we refer to it as a Western Flycatcher, which includes the similar looking Cordilleran Flycatcher) that wintered in the area. This species is an abundant fall migrant at CCRS but it is only the second one we have caught during the winter season. Another Western Flycatcher was present during the winter of 1991-1992. Finally, on December 5, 1997, we banded a White-throated Sparrow. It was once thought to be found strictly east of the continental divide, but in the last few decades it has become more regular during migration and winter in California. We average one or two per winter, and have had individuals spend the entire winter at our site. This winter's White-throated Sparrow was considered to be in its hatch year, meaning that it hatched during the summer of 1997. It will be interesting to see if this sparrow returns next year. Of all the White-throated Sparrows we have banded, only one has returned for more than one season. This case suggests that these birds may not be lost and disoriented when they find themselves in California. Rather, they are choosing California wintering sites that they come back to year after year. Only more banding will establish if this is indeed the case. ♣



Western Flycatcher  
*Empidonax difficilis*

New this issue....

Play CCRS trivia and win a cool prize!!!

What is the length in miles of Coyote Creek?

Answers must be received by September 1st. Please mail responses to CCRS or email us at [kristen@coyotecreek.org](mailto:kristen@coyotecreek.org). No purchase necessary. Void where prohibited. Staff and their families are not eligible.



Coyote Creek Riparian Station is a community-supported, non-partisan, non-profit organization devoted to research, restoration management, and education regarding riparian habitat. With the help of many dedicated members and volunteers, the station collects and analyzes biological data and disseminates information to local, state, and federal agencies, as well as to the public. Our goals are to advance understanding of these complex ecosystems, provide a sound basis for environmental education, and promote informed decision making.

The Coyote Creek Riparian Station (CCRS) began in 1982 as a field station for the study of migratory land birds and was part of the San Francisco Bay Bird Observatory. Under the direction of Dr. L. Richard Mewaldt, professor of Zoology at San Jose State University, the Station became a nonprofit research institution in 1986. The Station gains much support, both time and money, from its 500+ members.

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.

RipariaNews is published quarterly to inform our membership; the personnel of the cooperating federal, state, and local agencies; and other organizations and individuals concerned with the flora and fauna of the riparian and wetland habitats.

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Letters to the editor are welcome.

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### CCRS Membership

Student/Senior	\$15 annually
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Sustaining	\$100 annually
Corporate	\$500 annually
Life	\$600*
Patron	\$3000*

**\*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 our newsletter. We welcome bequests, including those of real property.