

International Bird Rescue

NEWSLETTER

A Quarterly Publication of the
INTERNATIONAL BIRD RESCUE RESEARCH CENTER
2701 Eighth Street, Berkeley, CA 94710

Non-Profit
Tax Exempt
Tel: (415) 841-9086

Volume 2 Number 2

* * * * *

IN SEARCH OF THE WESTERN GREBE

Being a confirmed grebe addict, it was always a dream of mine to observe the courting and nesting behavior of Aechmophorus occidentalis (Western Grebe). In May of this year another grebe nut and I set off to do just that. Destination: Oregon.

The first grebes we saw were on Lower Klamath Lake, one of the twenty lakes we investigated. It was a bit early in the year for nesting but courting was very evident.

The courting run or "barging" is nothing short of spectacular. The pair, separated by about two meters, face one another and stretch their necks straight forward so that the bills are just at the water line or slightly submerged. One then lifts its head while shaking it and returns to the former straight-out position. Then the other does likewise as the pair draws closer together. Alternately lifting and shaking their heads, they give no apparent warning before suddenly rising up out of the water to perform the courting run. Side by side, necks recurved, bills tilted up, feet beating the water, they run over the surface! The end of the courting run does not end in unison as one usually drops gracefully head first below the water's surface before the other follows at a different angle or course heading.

At every lake we visited, we measured water temperature, pH, and specific gravity. We noted the proportions of 'white faced' Western Grebes to 'black faced'. We used a stop watch to measure time spent above and below water as well as cumulative preening time. We made several observations on the Pied-Billed Grebe (Podilymbus podiceps) as well.

--Alice B. Berkner



BIRD COURSE: OFF TO A FLYING START

The bird course that we are offering through the University of California had a marvelous beginning on February 8. There were about 37 people stuffed into a smallish room in Dwinelle Hall on campus all eager to participate. Everyone introduced themselves except for a pair of domestic Pekin ducks and Charlie Chicken (a prepared skeleton). Slides of the 1971 San Francisco Oil Spill were shown and Dr. James Harris presented an introductory lecture on anatomical adaptations of birds.

The course is now being held at the Bird Center as a portion of each class is devoted to handling and treating live birds. The Dog Obedience Training Room of the Berkeley Humane Society serves nicely as our classroom except that the forced-air heater is noisy enough to offer stiff competition for anyone's voice.

We are delighted to have representatives of Clean Bay, Inc. and the American Petroleum Institute attending the course.

Must tell you how greatly I enjoy 'our' newsletter. -- Sorry I am not able to get in on the actual care and help. At least I am following suggestions and writing to Mr. Hay. Very best of luck.

Appreciatively yours,

Blanche Wein

I would like to see an article on advice to cat owners. I am also in a quandary as to whether or not to provide feed and baths for birds.

Sincerely,

Mrs. N.R. Young

(see page 12 - Ed.)

The work of people like you is truly inspiring. Without fanfare, high overhead, expenses, etc. what you are doing to help the helpless is something that brightens the day to think about.

My best wishes,

Margaret M. Nelson

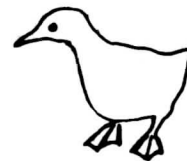


ANOTHER BAND RETURNED

John Smail of the Point Reyes Bird Observatory has notified us of a band return. The banded bird was a Western Grebe found dead in the state of Washington on January 26, 1973. The bird was a victim of the San Francisco Oil Spill in 1971. She had been cared for at our Richmond Center and released on April 9, 1971.

NEXT ISSUE

April showers bring May flowers and oiled California Murres, over 80 of them. A detailed account will be found in the next newsletter.



JUNIOR BIRDGIRL

Here it is again summer. My ducks are fine and are getting weirder all the time. Now when I let them out all I have to do is open the door and they give a little leap and a little wing power and when they get to the top (about 2 ft.) and then jump down. Then they follow me into the garage. As they chase me they bite me. As I said last time Socrotesse chases me etc. and now Tina chases me but does not do a little act. Well I guess that's all for this article.

Please tell others about us. Our subscription rates are:

| | |
|--------------|------------|
| Student | \$ 2/year |
| Regular | \$ 5/year |
| Family | \$10/year |
| Contributing | \$25/year |
| Supporting | \$100 |
| Sustaining | \$250 |
| Corporate | \$500/year |

WE NEED :

- A telephone answering machine.
- A volunteer typist .
- Four 30Gal. trash cans.
- Small surgical instruments: hemostats, thumb forceps, needle holders.
- A go-getter to work on funding.

On March 17, Alice Berkner and David Smith of IBRRC met Bud Rienecker of California Fish & Game on a dirt road near Vallejo, California. Bud Rienecker was making his rounds of waterfowl traps for the purpose of banding Canvasback ducks. IBRRC went with him to draw blood samples in order to help establish normal values of blood chemistry in free-living waterfowl.

The front seat of a 1954 Chevrolet served as a mobile laboratory as the samples were being drawn from each bird.

When the last bird was safely back in the wild, the blood samples were taken to the Valley Veterinary Hospital in Walnut Creek and given to Dr. Bernard Feldman for laboratory analysis.



Those of you who have cats are, I am sure appalled when Puss delivers to your front door a feathered offering. Many of the birds brought to Bird Rescue are cat victims. Injuries of this nature are, for the most part, severe and recovery (if any) is a very slow process.

If you own a cat there are measures that can be taken to prevent or minimize injuries to birds. The best way is to keep your cat in the house. Should this be impractical, a bell on a collar (there are special break-away belled collars available in pet stores) is often effective in announcing Puss' presence to feeding birds. Cats can be prevented from climbing trees containing birds nests by placing circular wire guards around the trunk about two or three feet above the ground. The guards should extend out approximately one foot from the trunk.

If these measures seem to be more trouble than they are worth, keep this in mind: cats are quite numerous, they are very proficient predators, and they are an introduced species to North America.

OAKLAND OIL SPILL

The following is intended to be nothing more than a numerical summary to the article that appeared in the previous issue of the NEWSLETTER. There are several slight differences in the totals due to discoveries of 'accounting' errors in earlier tallies.

Once again we wish to thank all those people who helped in any way with this relatively successful effort.

| | Released | Died | Total | % Survival |
|---------------------------|------------|------------|------------|------------|
| Red-Throated Loon | 0 | 1 | 1 | 0 |
| Western Grebe | 6 | 29 | 35 | 17 |
| Horned Grebe | 0 | 14 | 14 | 0 |
| Eared Grebe | 1 | 1 | 2 | 50 |
| Pied-Billed Grebe | 2 | 24 | 26 | 13 |
| Mallard & Mallard hybrid | 19 | 6 | 25 | 76 |
| Canvasback | 9 | 3 | 12 | 75 |
| Scaup Spp. | 22 | 10 | 32 | 69 |
| Goldeneye Spp. | 8 | 14 | 22 | 36 |
| Ruddy Duck | 1 | 16 | 17 | 6 |
| Black-Crowned Night Heron | 1 | 0 | 1 | 100 |
| Clapper Rail | 3 | 3 | 6 | 50 |
| American Coot | 70 | 43 | 113 | 62 |
| Dunlin | 0 | 1 | 1 | 0 |
| California Gull | 1 | 0 | 1 | 100 |
| <u>TOTAL</u> | <u>143</u> | <u>165</u> | <u>308</u> | <u>46</u> |

JEMIMA PUDDLEDUCK

(with apologies to Beatrix Potter)

Once upon a time there lived in a pond in Concord a Pekin Duck. She had a very pleasant existence until one day when her leg started to ache. From then on it was all down hill for poor Duck. The bad leg got worse, her feathers were no longer waterproof and because she was crippled she could not get enough to eat. Fortunately for the poor duck two very kind girls noticed her distress. The girls, Margaret and Sue, picked up poor Duck and took her home. Their mother called Bird Rescue and before long duck was enjoying a private pen, all the grain she could eat, and whitebait for extra protein, antibiotic ointment for her infected eyes, and asperin for her sore foot. She was also given a bath daily which started her preening once more. Best yet, she was given a name, Jemima Puddleduck!

Jemima's improvement was nothing short of a miracle! She regained complete use of her bad foot, her eyes were well, and her feathers beautiful to behold. The time came for Jemima to return to her pond. The family came to pick her up and it was difficult to convince them it was the same bird. So Jemima is back on her pond a happier and healthier duck leaving behind people who are glad to have been able to help.



BIRD FEEDERS AND BIRD BATHS

This article is in response to a query from Mrs. Young, one of our subscribers. The primary purpose of bird feeders and bird baths is to attract birds to a given area, such as your yard. They are not necessary for a bird's survival but they do give great pleasure to many people, myself included.

When purchasing a bird feeder (or making one) you should have certain requirements in mind. It ought to be easy to clean, water-proof, easy to fill, and inaccessible to cats. Do NOT place

your feeder near bushes and trees. Feeding birds must have unrestricted visibility to best see any cat that might be creeping up on them. The same goes for bird baths.

Wild bird seed is most economical when purchased in large amounts. I buy 50 lb. bags at a pet store. It is imperative that the seed be stored in a dry place. Damp seed can easily go moldy. NEVER USE MOLDY SEED. Check your feeder frequently, especially in wet weather. Germinating seeds can stop up a feeder making free flow of seeds impossible.

Bird baths need very little other than a supply of water and a weekly cleaning. All land birds need to bathe and why bird baths have been neglected is beyond me. Both feeders and baths can be purchased at pet and garden stores but do remember that cost does not count with a bird. Often the most inexpensive, perhaps homemade, feeder or bath is the more suitable.

PRAIRIE FALCON WATCH

Prairie Falcons are beautiful, fast, and very adept at catching prey. They have all the attributes that a falconer looks for in a bird. The law, however, prohibits falconers from possessing Prairie Falcons as these birds are far from plentiful. Some unscrupulous falconers have little respect for the law or for ecology. For a number of years, falconers have been taking all of the infant Prairie Falcons from a nest in the San Francisco Bay region.

Local Audubon groups have set up a watch to prevent predation by falconers and IBRRC has been delighted to provide personnel for two 24-hour watches. As a result of careful guarding of the nest, seven young Prairie Falcons have been successfully reared over the last two years by their parents.

Keep yourself informed of the activities, legal and otherwise, of falconers in your area. They may consider ecology to be far less important than the thrill they get by 'owning' a magnificent bird of prey and prostituting its talents.

CONCERNING ORPHANED BIRDS

(Editor's Note: Orphaned young birds enter all of our lives at some time. It is a credit to the human condition that almost all of us wish to give a portion of ourselves to save these helpless creatures. The following article by Mal Raff (printed here without editorial alterations) is full of information concerning the care of young birds, yet wisely advises against assuming such a task lightly.)

Recent federal laws prohibit captive maintenance, even for purposes of rehabilitation and release, of essentially all native birds. According to the law, permits must be obtained, therefore it is essential that all attempts be made to locate the individuals or group, if they exist, that offer competent, legal bird care in the area. Furthermore, they are probably better equipped to cope with the situation and perhaps could use your help as well. Your local Audubon Society or state wildlife agency should be contacted immediately to learn the location of such a facility. Specific laws differ from state to state; many are more stringent than California. It is best to check.

If no trained person is available to help then, and only then, should any attempt be made by the layman to raise or rehabilitate wild birds. Particularly with nestlings, the time expenditure required for a single bird is far too great, and the probability of successful release is far too small to make the effort worthwhile. It would be better to spend the time in efforts to save the environment and to make it safe for birds by keeping man and his introduced predators (such as dogs and cats) under strict control.

What follows are very crude recommendations for the care of young birds. For medical problems, seek the aid of a qualified, competent veterinarian.

GENERAL COMMENTS

Of paramount importance for proper care is correct identification of species. With nestlings this is nearly always very difficult, particularly if the bird is not yet feathered. In many cases, correct identification of fledglings and immatures can only be made approximately due to

similarities in the young of many species. By all means utilize the expertise of local zoologists (ornithologists if possible) and/or qualified Audubon personnel. Knowledge of habitat, nesting behavior, and geographic range of different species is very helpful.

Naked nestlings usually require high temperatures for survival, not uncommonly near 100° F. A heating pad may be used to provide warmth and an outdoor thermometer can be used to monitor the temperature. A temporary suitable home should be provided in the form of a cup-shaped 'nest' placed in a box for protection and to lower visual stress. A soft absorbent lining such as paper towels or tightly woven cloth should be used and changed often. Humidity is also a factor and probably should be kept relatively high by using a cup of water or some equivalent, in the warm enclosure. Exercise care so that the nestlings become neither damp nor dehydrated. Partially feathered young would probably do well around 80-85° F; fully feathered birds with fluffy plumage require no additional heat unless ill. Birds kept in a warm air environment tend to dehydrate extremely rapidly, as evidenced by very dry, tight-fitting skin or dry droppings. Therefore water must be given, but only in very tiny amounts at a time. An eyedropper is useful.

Nestlings and fledglings (feathered nestlings that tend to leave the 'nest') will usually gape for food. Exceptions are pigeons, doves, raptors, and many sea birds. In some cases it may be necessary to force feed by making foods more liquid, carefully prying open the mouth and emptying an eyedropper filled with the food well down the throat.

Immatures probably present the most difficult problems. Foods of many varieties should be strewn about on the floor of their cages and water provided for bathing and drinking. Force feeding, at least once, may be required. Periodic weighing of individual patients and continuous attention to their droppings are really the only way of telling the health of the bird. Behavior may remain spirited and 'normal' until death. Non-spirited, behaviorally depressed birds are extremely serious problems. Experience here is very important. Seek the aid of

someone who has had prior encounters with similar species and can observe the behavior with some basis for comparison.

FOODS

Grain foods (high protein baby cereals wheat germ, oat flour, etc.) can be used as primary diet in sparrow/finch species, until they are self-feeding when some live insect foods should be made available in small quantities. Solid seeds, such as wild bird seed, parakeet or canary mixes, sunflower seeds, peanuts, etc., should always be made available to feathered nestlings since they may begin self-feeding. Immatures and 'adults' should also have a variety of solid foods to choose from. Occasionally meat foods, such as dog foods (dry or canned) or live foods (meal worms, etc.) should be included. Live foods must be provided for those species, a large part of whose diets are insects. Thrushes, jays, bushtits, woodpeckers, swallows, flycatchers, etc. are in this group. Bushtits and sapsuckers and some others cannot handle hard skinned insects. Recently molted meal worms (white in appearance) that have been killed with several hard pinches from a pair of tweezers can be fed to these species.

Check with a reputable zoologist if you are the least bit unsure of a species complete requirements. Meal worms and/or canned dog foods, as well as the dry varieties (Gaines Meal, etc.) are reasonable diets. Fruits are good foods for almost any species. Cut-up apples, grapes, strawberries, pears, bananas, etc., make mild nutritional additions to any diet. Watersoak dried fruit to soften them. 'Mockingbird' food, 'nestling' food and similar products can be used, but are somewhat more expensive.

FEEDING

Frequency. Frequency of feeding varies with species and age. The younger birds should be fed frequently, every 30-60 minutes perhaps. As they age, larger quantities at longer intervals may be fed. Fear of underfeeding is far more important than overfeeding, which is not usually the case. However, use care since infant birds can and will stuff themselves to the point where damage to esophageal tissues may result (such as minute tears from too much stretching) allowing infection to occur. Remember that nestlings are able to do 3 things well: sleep, 'beg' for food, and grow. They have as much conscious control of the former two items as they do of the latter

one. A completely filled up nestling, if properly stimulate, will call for more food!

Methods. Methods of feeding also vary. Gaping birds may be fed from the tip of a very blunt stick. Use extreme care since in their vigor they may irritate mouth and throat tissues from constant contact with the tool. Chopsticks, smooth drink-stirrers, long-shaft cotton swabs, and similar items may be useful. Toothpicks may be too sharp. Foods should be pasty-dry in consistency so they may be held on the end of the stick. Eyedroppers are also useful, particularly for smaller birds, since quantity per dropper-full is small.

SPECIAL CASES

Hummingbird nestlings (a special problem) do well on 4 parts water to one part table sugar (or even dextrose). Additional nutrition must be provided with insect foods such as fruit flies, meal worm insides (skins too tough), or as unproven substitutes, Similac or mockingbird food mixed in small amounts with the liquid diet for protein. A mixture of 1 part Similac, 4 parts sugar, 20 parts water may be sufficient. Take great pains to insure that none of the fluid is ever allowed to get on the bird's feathers, since it sticks them together making it impossible for the bird to properly align the feathers in preening them to protect itself from the cold (hummers have body temperatures near 115° F!).

Raptors may pick at bits of raw meat (diced chicks, mice, or rats). After eyes have opened, larger bits can be offered until whole, dead animals may be taken. No one individual animal should be used as the sole diet; variety is necessary. At least alternate between rodents and chicks. Butcher meats are very poor alternatives. Roughage is not essential.

Pigeons and doves may suck foods from a small cup or pick at grains scattered nearby. It may be necessary to pry open the mouth and put in a ball of food as they do not gape.

Sea birds may pick at bits of food (fish) dropped or held nearby.

Further information regarding specific immediate problems may be obtained by phoning me anytime: (415) 843-2032. For less pressing problems, drop a line: 1616 Walnut, Berkeley, Calif. 94709.

SUBSCRIBERS AS OF APRIL 30, 1973

JUNIOR

Jaqueline Barksdale
California

Judy Eerkner
California

Mark H. Berkner
California

Dennis Burchett
New York

Joshua H. Cobb
Colorado

Carolina A. Cruz
California

Jeane L. Glens
Maryland

Lydia B. Hoskins
California

Lillie B. Kelley
California

Jaqueline H. Marella
California

Margaret L. Walker
California

STUDENT

Brian Olson
California

Mattell Fandle
California

Michael Richardson
California

George Sage
California

Martin E. Thomas
California

Agatha Trujillo
California

Frances White
California

Karen White
California

Kevin White
California

REGULAR

Carl H. Bachmann
California

Linda Jo Baker
California

Tessie Carran Baldwin
California

Nancy Bauer
Maryland

Mrs. Doris P. Baumgartner
California

Evelyn Bell
California

Mabel Bell
California

Cheryl Bentley
California

Martha C. Bentley
California

Philip P. & Jean Berger
California

Fagnvald Bernt, Jr.
California

REGULAR

Maida A. Caughlam
California

Judith Cherin
California

The Children of Christ Episcopal Church
California

Susan Chin
California

Mrs. Trudea's Class
Cholla Elementary School
Arizona

Olga Chomchak
New York

H.H. Clare
Canada

R.D. & Julia R. Cleland
California

Marie V. Collins
California

Serials Unit
Colorado State University
Colorado

REGULAR

STUDENT

Animal Switchboard
California

Mrs. J.P. Barenchi
California

Haakon L. Chevalier
Illinois

Joseph & Nancy Cotham
California

Mrs. E. Erratt
California

Ms. B. George
California

Marion I. Guion
California

Lillian L. Haltier
California

Peter T. Harris
Maryland

Hugh Hunt
California

Imo Jean King
California

Miriam G. Lemos
California

Carol A. Levy
Texas

May I.E. Magrath
District of Columbia

Karen O'Callaghan
California

Katy O'Callaghan
California

Kent O'Callaghan
California

Charles & Jean Abbott
California

Catherine Anita Albert
California

Mardy Alexander
California

Mike & Beth Allegreto
New York

Mrs. Herbert Allen
California

Phyllis B. Alton
California

Frederic Amory
California

Joanne Anderson
Wisconsin

Peter & Sally Anderson
California

Dorothy Andrews
California

Kitty Andrews
District of Columbia

Heath Angelo
California

Gui De Angulo
California

Isobel Arena
California

Maryann Argyles
California

Sue Van Atta
California

Mrs. Constance Babb
British Columbia

Mrs. Thea E. Babbitt
California

Stasia DE Bitanco
District of Columbia

Mr. & Mrs. Frank Bishop
California

H.L. & Ann Bixby
California

Norma J. Blanco
California

Allen B. Blandfield
New Jersey

Lt. Col. Richard & Jacqueline Bonds
California

Mrs. Anne Bouchette
Virginia

Starr Bowie
Virginia

Rhoda Boyd
California

Wendy Boyd
California

Diane Bradstream
Arizona

Mary-Elizabeth Green Brereton
California

R.H. & Bonnie Jean Brick
California

Ruth Breton
California

Richard C. Brown
California

Robert F. Carcot
California

Mr. & Mrs. Earl Carsten
Arizona

David Catanho
California

Sylvia Catterton
California

John W. Conner
California

Beth Cooper
California

Catherine Cordeiro
California

Flora E. Covell
California

Constance Denshasy
California

Margaret Devenport
Arizona

Joyce P. Dixon
Tennessee

J.B. Drori, M.D.
California

Alice Duggan
California

Evelyn & Clarence Dulfer
California

William & Lydia Edison
California

Environmental Action Committee
of West Marin
California

Richard Van Eoos
California

Mrs. Gertrude Eskelson
California

Raymond Eshelman
Missouri

Mrs. John Evancho
Arizona

Mrs. William P. Everts
California

Mrs. Helen Farnsworth
California

J. Fava
California

REGULAR

Jewel Fay, M.D.
California

Mrs. Beryl Fenchel
California

Margaret Fenton
California

Edward S. Finkelstein
California

Florence D. Fisher
California

George Fitzgerald
Virginia

Amaryllis Fletcher
New York

April E. Fletcher
California

Stanley Fletcher
New Mexico

Elsie Poster
New York

Capt. David H. Fox, O.D.
Georgia

Jeanne Frommage
California

Michael E. Fry
California

Suzanne Galliher
California

Marilyn Garrett
California

Charles & Louise Garry
California

Dr. & Mrs. L.O. Gearhart
Iowa

Nicholas Del Genio
Washington, D.C.

Myrtle T. George
Arizona

Alice C. Gerhardt
California

Maurice & Virginia Gerritsen
California

Oscar & Caroline Ghebelian
Maryland

Douglas Giebel
California

W.C. & Marcelline Goins
California

Mary Fehling Gough
Virginia

Ruth S. Gouinlack
New York

Miss K. Grant & Class
Beldoen Elementary School
California

Sadelle Greenfield
California

Joan & Galen Grinna
Texas

Doris M. Budd Griset
California

Elizabeth Hair
California

Linda S. Hallmark
California

REGULAR

Jane Hansen
California

Mr. & Mrs. S.C. Harmell
California

Stephen Harmon
California

Diane Harsh
California

Alan & Linda Harshberger
California

Eleanor Hasson
California

William & Ethel Haugh
Maryland

Lillian S. Herivel
California

Jeanne Robson & Thomas Hersh
California

Olivia J. Hewlett
California

Joseph & Jan Higgins
California

Puth S. Hill
Virginia

Carol Hironymous
California

Madge Holland
California

Jaquelin Horodko
California

P.J. House
California

Joan Howell
California

Carol Hubbard
California

Edna F. Hubert
California

Heidi Hughes
New Jersey

Marjorie E. Hughes
Iowa

Mrs. May Belle Hughes
California

Elizabeth Hunter
Virginia

Dana F. Irwin
California

Frederic E. Irwin
California

Mrs. Emma Isben
California

Mr. & Mrs. Neil Jandow
California

Audrey Janisen
California

P. Jensen
Oregon

Margaret Jesseph
California

Bruce G. Johnson
Maryland

Mrs. Harry Wm. Johnson
Arizona

REGULAR

Helen L. Johnson
California

Jackie Johnson
California

Phyllis Johnson
California

Wanda M. Johnson
California

Cindy Jones
California

Helen Maritianos
California

Anna Kartran
California

Beverly J. Kaye
Virginia

Ruth Kielkopf
Virginia

Lorraine Kivaly
Arizona

Lois B. King
California

Marguerite Kluth
Wisconsin

Denis Knowles
Bahamas

Laura Knowles
Iowa

Evelyn Knouf
Washington

Mrs. L.C. Koke
California

Sue Kristin
California

Skip Kruse
California

George & Cathryn Kunz
Iowa

Charles F. Kurtz
California

Elwood Kyonick, M.D.
California

Florence Lallas
California

W. Toy Lee
California

Sonia Levine
Arizona

Stephen Levine
California

Miriam Levitt
California

Barbara Leyba
Maryland

Faymond Lifchez
California

Diane Lobbe
Washington, D.C.

Ursula Lucks
California

Helen Ludlow
California

Madrone Audubon Society
California

REGULAR

Martha Magruder
Maryland

Emily L. Mannion
California

Edward & Eloise Margus
New Jersey

Marin Mounted 4-H
California

Leslie Markham
California

Wilma M. Martens
California

Sheila Martin
California

Doria L. Mason
California

Jeanne Massey
California

Barbara F. Masur
Washington, D.C.

Thomas E. Mattson
California

Willard L. McFarland
Maryland

R.K. McKean
California

William A. McRobbie
California

Ruth E. Meek
Arizona

Robert F. Mena
California

Donald N. Millen
California

Charles & Jeanette Miller
Washington, D.C.

Mrs. Charles Keith Miller
California

Janice Mitchell
California

Carl & Carlu Monje
Maryland

Barbara C. Monro
Canada

Monteral Jr. High School
Ecology Club
California

Mrs. W.D. Moriarty
California

Augusta Morse
California

R.M. Mucklow
California

Goldie Murphy
Arizona

Chuck Myer
California

Julie A. Nagle
California

Richard Navarro
California

John F. Nelson
California

Peter & Carolyn Nielsen
California

REGULAR

Elnor Nieman
California

Leleand & Eloise Noll
California

Walter & Dorothy Olsen
California

Irene M. Oppenheim
California

Mrs. Shirley Osborn
California

Mildred Osmer
California

F.L. & P.M. Ostergaard
California

Col. C.H. O'Sullivan
California

Carin Ozmun
California

Joseph & Helen Parker
Maryland

Donald & Jennie Farlier

Hils Parson, MD
California

Ernest Pazzi
California

Hilda Peterson
California

Julia Peterson
California

Norma J. Phillips
California

Suzanne De Pichon
California

Arthur & Lois Pieper
Virginia

Richard H. Fough
New York

The Print Mint
California

P.M. Quinlan
Virginia

Jacqueline Paine
California

Adele Pandall
New York

Ann Y. Feplogle
California

John & Paula Ehude
California

Ruth W. Richard
Arizona

Jean Ritchie
California

Shirley P. Roberts
California

Opal Rodgers
California

R.M. Rodrigues
California

Ella M. Pudolph
California

Mr. & Mrs. Burton Sanders
California

REGULAR

Mr. & Mrs. Neil Sandow
California

Vicky & Thornton Sargent
California

Genevieve Sattler
California

Richard Scheible
California

Ann Schiffer
California

Richard & Joan Schmidt
Maryland

Marie Schneider, R.N.
Pennsylvania

Michael Schramm
California

Gladys D. Schubert
Virginia

Stanton G. Schwartz, M.D.
California

Gino & Grace Sensi
California

Oliver Seth
California

Emily Van Sickle
Washington, D.C.

Tom M. Siegel
California

Posina M. Siemens
California

Mrs. Richard J. Siewers
Washington

Edward Slattery, Jr.
Washington, D.C.

Betty Smelser
California

Ernestine I. Smith
California

Anne Sprows
California

James & Tera Stanley
California

Dr. Amy N. Stannard
California

I. & Victor Stanton
California

Doris Steffer
California

Ellen Sterling
California

Victor & Katherine Stevens
California

Rosemary P. Stock
California

Virginia L. Stone
California

Thad & Janet Stover
Virginia

Ted & Myra Strauss
California

Georgia Struthers
California

Ethel M. Swedlow
California

REGULAR

Mrs. Merle Taylor
California

Stephan W. Thomas
California

Ronald & Carole Thompson
California

Thomas J. Thompson, D.V.M.
California

Mr. & Mrs. Ralph Thrasher
California

Mr. & Mrs. Richard Thunen
California

Don & Josephine Thwaites
California

Barbara Treat
Massachusetts

Holly K. Tubbs
Washington

Unto Others Circle of the Kings
Daughters & Sons, Inc.
California

Joyce L. Vedder
California

Bob & Gerry Vieten
Missouri

Mrs. Evelyn M. Walker
California

Martha Walker
California

Mr. & Mrs. William P. Walter
California

Narvin Walton
California

Victoria E. Ward
California

Mrs. Lurene A. Warters
Iowa

Merna Wayshal
Maryland

Mr. & Mrs. Conley Weaver
California

C.R. & Phyllis Weaver
California

Josephine H. Webster
California

David Alan Weiner
California

Anne Weisburg
Washington, D.C.

Isabel Weissman
California

Barbara J. Weith
Minnesota

Ruth C. Welch
California

Audrey White
California

Edward White
California

Elizabeth Marie Whitmore
California

Cita Widmann
Virginia

Miriam Wilkins
California

REGULAR

Joseph Dimmick Wilson, Jr.
California

Herbert Wilzinski
California

Cheryl Ann Winkler
California

Mr. & Mrs. Winnick
California

Lisa Wishard
California

Dr. & Mrs. F. James Yandell
California

Patricia Zajec
California

Russel & Genevieve Zinn
California

FAMILY

Mr. & Mrs. H.R. Ackerman
California

Marlis Aeberli
California

Beatrice M. Aikman
California

Robert & Jessie Alves
Nevada

Eleanor C. Anderson
California

The J.K. Anderson Family
California

D. Virginia Arner
California

Diane & Kenneth Atterbury
California

Clarice M. Behm
California

Nedra B. Belloc
California

Frank de Benedetti
California

Mrs. W.C. Bergren
California

Philip & Anne Biel
California

George Ereslauer
California

Joe & Dorothy Canet
California

Dr. Evelyn Hart Case
California

Robert & Hilda Clark
California

Richard S. Cohen
California

Henry & Dorothy Couden
California

Charles & Bonnie Davidson
California

FAMILY

FAMILY

FAMILY

James & Nancy Davidson
California

Mr. & Mrs. R.E. Dudley
California

Ruth Elwonger
California

Mr. & Mrs. W.D. Epstein
California

Mr. & Mrs. John M. Evans
Maryland

Dr. Susan Farmer
California

Miss Edwyna Von Gal
California

Dr. & Mrs. L.B. Gearhart
Iowa

Arthur E. Gordon
California

Mrs. C.E. Haines
California

Carol Hamilton
California

Jeanette Hamilton
California

Fred & Edna Mae Hara
Virginia

Hawaiian Humane Society
Hawaii

Mrs. W.D. Hickman
Virginia

James W. Higbee
California

Kenneth E. Hill
New York

Louis Hochberg
California

Clarence & Marjorie Howe
California

Janet Hunter
California

Constance H. Illsley
California

Sylvia W. Iselin
California

Phillip S. Jacobs
California

Freda M. Kappner
California

Mr. & Mrs. Jack F. Kirsch
California

Margaret Shedd Kisich
California

Beatrice A. Klug
California

Jeanne C. Koelling
California

Geraldine F. Myer
California

Mrs. J.H. Langfield
California

Mr. & Mrs. Dan L. Leadlay
California

Ross M. Lernberg
California

Mr. & Mrs. Peter Lesser
New York

Susanna B. Lindquist
California

Mary Aiden Littauer
New York

Margaret A. Lockwood
Virginia

Lorretta Sue Maddox
California

Dr. & Mrs. F. Markell
California

Mrs. John Marks
California

Hazel S. Mays
California

Miriam Garland McCurdy
California

Martha P. McManis
Iowa

H. Murchison
California

Beatrice L. Myers
California

Mr. & Mrs. Larry Nager
California

Elsie & James Nelson
California

Gay Nelson
California

Margaret M. Nelson
Maryland

C.R. Nicewonger
California

William & Alayne Noble
California

Elizabeth J. Norton
California

Laura Palmer
California

A. Paskos
California

Alice Nina Peterson
California

George & Genevieve Pope
Pennsylvania

Henry & Ruth Paff
New Jersey

Mrs. Donald E. Richardson
California

V.M. & Jean Robertson
California

Vincent Robinson
California

Kristin L. Roper
California

Richard T. Sander
California

Mrs. George P. Saunders
California

Robert & Ellen Schon
California

Phyllis & Morgan Smith
California

Mrs. Margaret Tobin
California

Jane N. Ungar
New York

Virginia C. Warren
Washington, D.C.

John S. Warriner
California

Blanche B. Wein
California

Mr. & Mrs. Martin P. Weissman
California

Dr. & Mrs. Frederick C. White
California

John R. Woodside
California

F. Young
California

Nancy R. Young
California

SUPPORTING

Donald F. Bauman, M.D.
California

John Friedman
California

Golden Gate Audubon Society
California

Joshua D. Lichterman
California

Santa Barbara Audubon Society
California

Save San Francisco Bay Association
California

Joseph J. Woodburn, Jr.
Pennsylvania