International Bird Rescue
NEWSLETTER

A Quarterly Publication of the International Bird Rescue Research Center
2701 Eighth Street, Berkeley, California 94710 Tel: (415) 841-9086

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STATE AGENCIES NEGLECT OILED BIRDS

A couple of months ago I wrote to various state agencies responsible for wildlife inquiring about provisions they had for care of oiled birds. Nearly all of the states written to have now responded. Two states, Delaware and New York are in the process of compiling contingency plans with provisions for care of oiled birds. Connecticut has provided its field personnel with instructions on treatment and care of oiled waterfowl, and Washington has arranged for establishment of care centers. California has done both.

The other states, among them Virginia, Michigan, Massachusetts, Wisconsin, North Carolina, South Carolina, Louisiana and Florida, have taken little interest either because of the absence of serious spills to date or because they feel there is nothing that can be done.

We hope that taking on responsibility is the trend and that as contingency plans are published and research establishes better cleaning techniques, these other states will respond by developing adequate plans.

If you live in a state that has no adequate plan for the care of oiled birds we suggest you write to your state wildlife agency and demand that they take more interest in preserving our waterfowl from ecological disaster.

--April Fletcher

BIRD COURSE - MORE DETAILS

As part of our educational program, IBRRC is offering a course entitled "Problems of Wildlife and Wildfowl Crisis and Rehabilitation". The course is being offered through the University of California Extension and is scheduled for Thursday evenings, 7-10 p.m., September 28 through December 28. (No class Nov. 23) The course is being offered under the Department of Forestry and Conservation and may be taken for 4 units of credit. Classes will be held at the IBRRC facilities, 2701 Eighth Street, Berkeley.

I, other IBRRC staff, and guest speakers will lecture, instruct and guide the students in the various basic sciences and specialized disciplines needed to successfully handle wildlife in environmental emergencies. Participants will have ample opportunities to handle live birds and train in some of the aspects of avian husbandry.

Subjects to be covered include: Avian anatomy, physiology, pathology, nutrition, behavior, and first-aid. Also included will be record preparation, data collection, organization of volunteer personnel, and field procedures - including situation evaluation, capture, transportation, check-in examinations, treatments, and long-term husbandry problems of wildlife.

A detailed course outline and bibliography will be provided for participant use. The Center library will be available for reference and research work.

Interested persons should contact Cal Extension to enroll in the course. Phone: (415) 642-4111.

--James M. Harris

LETTERS TO THE EDITOR

Attached please find another small contribution toward your kindness to the birds from the Palace of Fine Arts here in San Francisco.

I was delighted to hear that you have had good luck with these birds and, of course, that our Jo-Jo is apparently doing nicely. We'll all be so happy to see these nice little creatures back home.

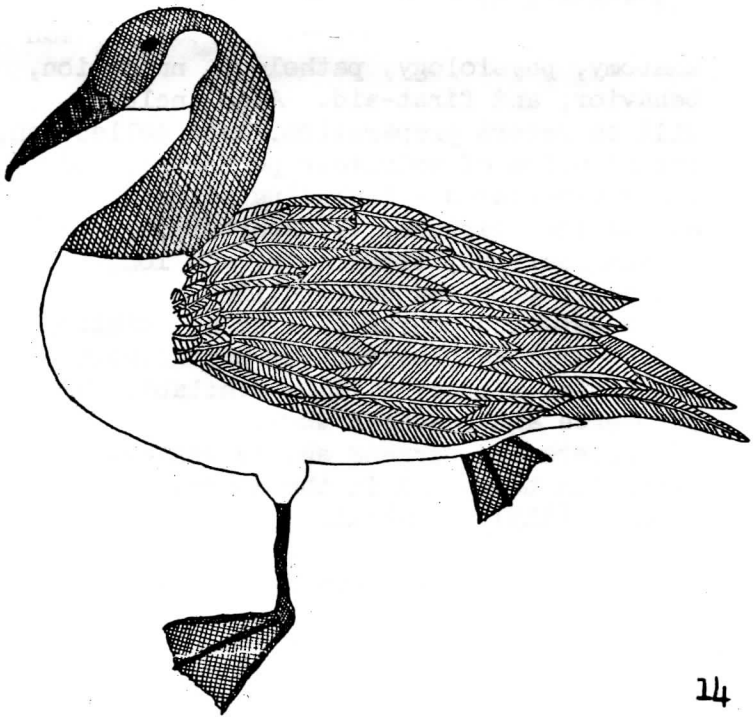
-- Laura Palmer
San Francisco, CA

We were delighted with the articles in the Berkeley Daily Gazette for July 19th about the work of the Center, not least for your contributions toward the E.P.A. decision (at last) to ban DDT.

-- Mrs. C.R. Nicewonger
Berkeley, California

My class has saved some money left over to give to the birds by saving aluminum cans. With the other money we bought some ice-cream and went to a Pet Shop then we went to the park for a picknick then we went back to the school.

Sincerely,
Verda
(Milpitas, California)



* CORRECTION *

In my article on Botulism in the last issue of the Newsletter I reported that "Dead birds, mollusks, insects and vegetation along with maggots and organically rich mud are sources of the lethal toxin."

According to research done by Brian Hunter, Dept. of Fish and Game, the toxin is not found in vegetation and organically rich mud, as previously thought, but is ingested by the birds in the bodies of invertebrates.

--Alice Berkner

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'NEW' SUBSCRIBERS

Beginning with this newsletter, IBRRC is including on its mailing list, for a one year period, those people and organizations who donated to the Richmond Bird Care Center. We feel that sending them our newsletters is one way we can in part express our sincere appreciation.

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RECYCLE!

This Newsletter as well as the previous one have been printed on recycled paper.

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PAPER CUTTER ?

IBRRC needs a paper cutter for the library. If you do not have one to give us, perhaps we could arrange a long-term loan.

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Please tell others about us.
Our membership rates are:

Junior	**$1/year**
Student	**$2/year**
Regular	**$5/year**
Family	**$10/year**
Supporting	**$100**
Sustaining	**$250**

TO THE RESCUE (AGAIN!)
(Dutch Duck Plague)

As I sit at the typewriter, I am surrounded by ducklings in cages, each cage labelled with a number. From an office down the hall eminates a raucous racket attributable only to geese, big geese. One of them is about the size of a B-47 bomber and may be carrying a load about as lethal. His name is Jo-Jo.

In April of this year Ducks and Geese began dying at the Palace of Fine Arts Lagoon in San Francisco. It is a beautiful place with buildings reminiscent of gargantuan up-turned grecian urns. Black swans and white would glide gracefully past flowered isles alive with the bustle of waterfowl families. Native migratory birds wandered pastorally with exotic birds brought from faraway places. And they began to die. None of the swans, but many of the "Easter" ducks; the domestic Pekin and Muscovy ducks. A few of the geese died, including an elegant Egyptian Goose.

Vandalism was suspected. Poison, perhaps. Dead birds were sent to several laboratories in hopes that the type of poison could be learned so that an antidote could be given. Or better yet, perhaps the source could be traced and the culprit thwarted. The full enormity was uncovered in the laboratory. Dr. James Fox and Dr. Stephen Snyder of the Laboratory of Animal Medicine at Stanford University named Duck Virus Enteritis (Dutch Duck Plague) as the likely cause of the deaths although no outbreak of this disease had ever been reported west of Pennsylvania. (Duck Plague had only first been reported in the Western Hemisphere in 1967.) The U.S. Department of Agriculture Animal Disease Laboratory at Plum Island, New York, confirmed the presence of Duck Plague virus in tissue samples sent to them from San Francisco in May. Apparently the extensive efforts on the East Coast to prevent the spread of the disease and stamp it out had failed.

The decision was made to depopulate the lagoon. All birds that potentially had been exposed to the disease were to be killed. The swans were the easiest to catch and therefore the first to be destroyed. Initial attempts to capture other birds were unsuccessful.

Meanwhile, I began running up our phone bill. I discussed the disease and the situation with Dr. Louis Locke of the Patuxent Wildlife Laboratory (Maryland), Dr. Louis Leibovitz and Dr. William Urban of the Duck Research Laboratory (New York), and Dr. A. H. Dardiri of the USDA Animal Disease Laboratory (New York). I read through the two references on Duck Plague in our library and arranged to acquire several more references by airmail. So informed, I could not be optimistic about the chances of convincing the requisite authorities to put the birds into quarantine rather than destroy them. About 300 birds were involved.

But April Fletcher tackled the task of disuading the government officials from their position of complete annihilation and pursued the possibilities of quarantine. On the other hand, James Schroeder of Wildlife Alive and Bruce Keegan (of the Bay Chapter, Sierra Club, but acting privately in this matter) argued against doing anything whatever to the birds because they believed that the disease had run its course and that even if it was a threat to the migratory birds it was probably already in the wild population anyway. Many irate citizens protested loudly and one, Mrs. Kingsley Moore, provided funds for Dr. Urban to fly out from the East Coast to attend the meeting that would decide the fate of the birds.

As a result of this meeting (reported elsewhere in the Newsletter) IBRRC was given permission to place 25 of the less common birds in quarantine at our Center in Berkeley. All the rest were to be destroyed. The number actually grew to 31 quarantined birds.

A heartening turnout of volunteers made it possible to convert office rooms into quarantine rooms and construct pens in time for the arrival of the first 27 ducks and geese on the 13th of June. There is a complex quarantine system to prevent possible spread of the disease which makes the simplest task quite involved and difficult. The birds have to be watered and fed (lettuce, fish, shrimp, corn, seed), pens cleaned, floors mopped, and records kept. In addition, 30 Pekin ducklings, being used to determine if the adult ducks and geese are carriers of Duck Plague, have to be cared for.

(continued page 16)

If everything goes according to hopes and plans, the ducks and geese from the Palace of Fine Arts will be able to return there in the middle of August. The ducklings may be used in tests with oil cleaning agents, and later in the classroom to train students in the skills of duck medication and handling.

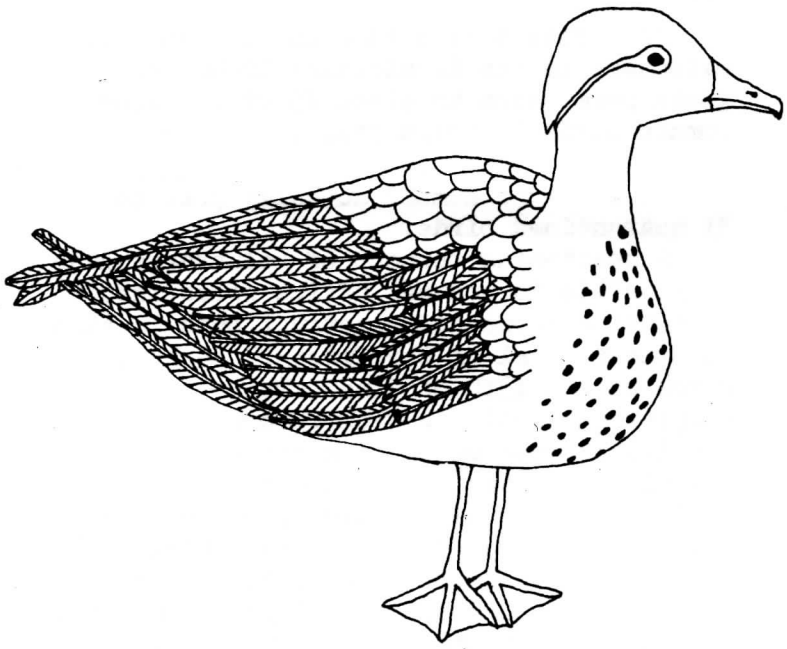
--David Smith

Addendum -- HELP!

This experimental program has been a drain on Bird Rescue's funds. Though manpower is voluntary (not a single worker or staff member of IBRRC is paid), getting equipment for setting up and maintaining these birds has been expensive - disposable plastic boots, aprons, coveralls, a water pump, over a hundred gallons of virus-killing disinfectant, a myriad of buckets, mops and brooms, and endless miscellaneous items.

We are as yet receiving no money from government or private agencies. Our sole source of funding is the money that we receive in donations (memberships included). Our expenses are running over five times all our sources. We need help now to maintain our programs.

IBRRC's continued existence depends on your help now! Please donate!



A FATEFUL MEETING IN SACRAMENTO

On June 7th I went to Sacramento to the meeting that decided the fate of nearly 300 birds at the Palace of Fine Arts Lagoon in San Francisco. Over a month before a number of birds had been found dead. Diagnosis: Duck Plague. It was the first appearance of the disease on the West Coast and the Department of Fish and Game had decided that depopulation was the safest way to handle the disease. Public ire was aroused. Killing wasn't necessary, they exclaimed. People had called their congressmen and demanded a stop to the action. And so this meeting had been called.

It was well represented. Already familiar to me were Dr. Rosen, pathologist of the Wildlife Investigations Laboratory who was in charge of depopulation operations, Dr. Naviaux of the Wildlife Health Foundation, and Mr. Schroder of Wildlife Alive. The latter two had been strong opponents of the action from the start. I was introduced to the rest: Mr. Fullerton, Chief of Operations, E. G. Hunt, Chief of Wildlife Management, Chester Hart, Chief of Environmental Services, all of the Department of Fish and Game; Dr. Wommack, Veterinarian of USDA who had initially requested depopulation, Jack Downs, U. S. Fish and Wildlife Agent for this region, Senator Nejedly, a representative from Senator Marks office, and Dr. Urban, Director of the Duck Research Laboratory at Long Island, among others.

I was at the meeting to offer IBRRC facilities for quarantining the birds. "How many birds can we handle if this can be arranged?" I had asked Dave Smith early that morning. "All of them!", Dave had said.

We didn't get all of them because the government officials believed there were too many risks involved, but the Department of Fish and Game did let us have the "more unusual" birds. These birds are being held at the Center facilities and tested for the presence of the disease in a cooperative research program with Dr. Rosen and the Wildlife Investigations Laboratory, Dept. of Fish and Game.

If all tests come out negative we are hopeful of releasing the birds back to the Palace of Fine Arts Lagoon in August.

--April Fletcher

A RECOVERED BIRD

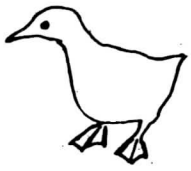
In March 1972 a Western Grebe washed up dead on Treasure Island in San Francisco Bay, eleven months after she had been released from the Richmond Bird Center.

She arrived at the Richmond Bird Center on January 23, 1971 from the bird care center at Poor Richards in San Francisco, having been cleaned, tubed and treated with azium. She was then banded with an unofficial band numbered 1968-6383. She seems to have no individual record from that time until March 25 when I noticed her in the "aspergillosis pen". She was a neat looking bird, and together with two others did not appear to be exhibiting nearly such bad symptoms as the other wheezers in the pen. These three were separated and swum daily from then on in a small paddling pool to avoid possible spread of infection to other birds using much larger pools. Their progress records were kept each day. 'Neat Bird' weighed 1 lb 15 oz on March 25. She swam ten minutes the first day before wanting to come out, and was very active in the water combing and flapping her wings. After her first swim she preened her feathers for one hour and fifteen minutes.

Twelve days later she was promoted to the larger pools, where by April 8 she could swim for forty minutes before climbing ashore, and was then only surface wet. Her record notes that she was "doing well". Two days later she was moved to the outdoor pool where she spent $2\frac{1}{2}$ hours in the sunshine alternately swimming, sunbathing, and preening. By April 13 she spent three hours almost entirely in the water, so we started her overnighting in the pool By this date she weighed 2 lb $7\frac{1}{2}$ oz. Her record remarks "What a fat girl, but was she huffing?" (a dreaded symptom of aspergillosis). However, as she was swimming so well we pushed her ahead. By April 16 she was seen diving and catching fish and floating high. That night she was noted sleeping on the water even though it rained. The following day Dick Scheibel banded her for us with a Federal Wildlife band, numbered 627-94536, and at 10:30 a.m. on April 18 she was released, together with another Western Grebe, from Richmond Rocky Point. They paddled away together, diving often, preening occasionally, and looking very cheerful.

It is encouraging that one of our more doubtful birds lived so long in the wild. It is unfortunate that the cause of death is not known, but it was obviously not the immediate consequence of being oiled and treated at Richmond. From this we hope that some of the birds that were in better condition may from time to time over the years be recovered.

--Es Anderson



JUNIOR BIRDGIRL

Here I am again; another column, the same year, another month, another day, and writing...

My mother said to write something different so I will.

Some people think that it is dumb to try and save birds because they're going to die anyway or they will give birth to others. Well it's not like that at all. The first one is partly right because if nobody does try to save the birds there will be none left. Period. The second one is wrong because if nobody saves the birds there will be none left to breed.

There's my column.

--Judy Berkner

BIRD DROPPINGS

by

Mal Raff

(A new quarterly column of interesting facts about birds)

Here are some isolated facts -- bits and pieces -- about bird appetites and foods. Most of this information is derived from a book compiled by National Geographic in 1937. Some items are the result of personal experience. One item is from the fabulous book on hummingbirds by Scheithauer and one further note is a relatively recent observation from Point Reyes Bird Observatory.

In captivity, healthy adult robins devour 150-200 (sometimes more) mealworms (7 to a gram) per day, or about 1200 per week, in addition to a few berries and other 'grain' foods.

This table lists the contents of the crop, gullet, and gizzard of single birds (except as noted) that were examined after being caught in the wild:

Tree Swallow	40 complete chinch bugs plus fragments of many others, and 10 other insect species
Bank Swallow	68 cotton boll weevils
Cliff Swallow	Average of 35 birds: 18 boll weevils each
Pine Siskin	Average of 2 birds: 950 blackolive scale insects and 150 plant lice
Kildeer	More than 300 mosquito larvae
Flicker	28 whitegrubs (of May Beetles)
Nighthawk	34 May Beetles (adult whitegrubs)
Nighthawk	24 clover-leaf weevils and 375 ants, 340 grasshoppers, 52 bugs, 3 beetles, 2 wasps and a spider!!
Boat-tailed Grackle	100 cotton bollwworms, plus a few other insects
Swainson's Hawk	100 grasshoppers
Ring-Necked Pheasant	8,000 chickweed seeds and a dandelion head

The remains of meals found near Barn Owl nests are of some interest:

Barn Owl	Nearly 1/2 bushel of pocket gopher remains
Barn Owl (Pair)	3,000 skulls (97% of mammals such as field mice, house mice and common rats)

In a large agricultural state, the total feed of tree sparrows alone might annually be in excess of 875 tons of plants considered to be weeds!!!

Many insects considered as 'pests' are preyed upon by several species of birds. Here are some examples:

Insect	No. Bird Species that feed on it	Insect	No. Bird Species that feed on it
alfalfa weevil	45	forest tent caterpillars	32
army worm	43	gipsy moth	46
billbugs	67	horseflies	49
cotton boll weevil	66	leaf hoppers	120
brown tail moth	31	orchard tent caterpillars	43

Insect	No. Bird Species that feed on it	Insect	No. Bird Species that feed on it
chestnut weevils	64	potatoe beetles	25
cinch bug	24	rice weevil	21
clover-root borers	85	17-year locust	38
clover weevil	25	twelve-spotted cucumber beetle	28
codling moth	36	whitegrubs	67
cotton worm	41		
cutworms	98		

And last but certainly not least, the nominee for the equivalent of human hamburger food:

wireworms eaten by 168 different avian species!!!

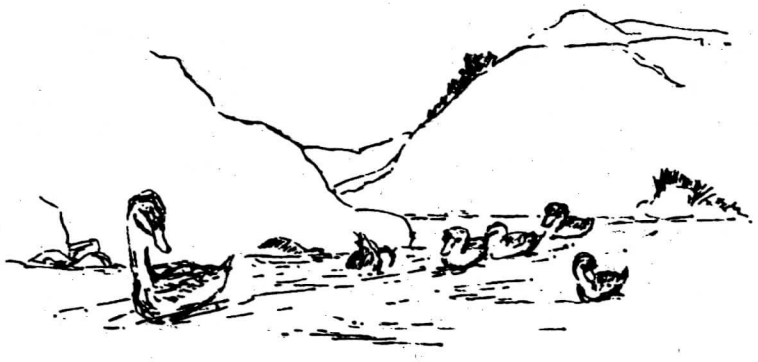
These are certainly only a few of the insect foods our birds dine upon.

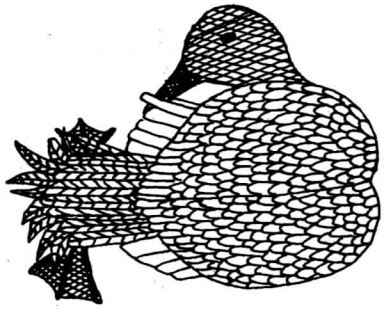
During the decade of the 60's the question of whether hummingbirds eat insects in addition to nectar was finally settled in a neat little home-made experiment. In his book "Hummingbirds", Scheithauer outlines this and several other equally clever little experiments. The results indicate that a hummingbird of about normal size typically might consume over 600 fruit-fly sized insects in a single day!!

Recently at Point Reyes Bird Observatory the nest of a Wilson's Warbler was observed from dawn to dusk. The parents made over 800 trips to the nest, carrying on the average 5 insects. That's 4000 insects per day just for the nestlings. What the parents ate was not observed. If the young are fed for 10-14 days, that means they'll be fed about 50,000 insects! At this point in time there are probably rather large populations of Wilson's Warblers around. If there are only 10,000 pairs of them, then 500 million insects will be devoured. And, if there are 10 times as many pairs, 5,000,000,000 insects hit the dirt in the form of droppings!!!

REMEMBER:

THE BEST INSECTICIDE COMES IN A FEATHERED CONTAINER!!!





A CENTER DISCUSSION
Topic: Cleaning Birds

On the 2nd of May a discussion was held at the Bird Center regarding the cleaning of oiled birds. Participating were William Clark of the California Department of Fish and Game, Dr. Murray Fowler of the University of California at Davis, Drs. Alan Pittman and James Roitman of the U. S. Department of Agriculture Western Regional Research Laboratory, and several staff members of the Bird Center. Also represented was Professor R. B. Clark of the University of Newcastle upon Tyne by means of a personal communication and mimiographed instructions for the cleaning of oiled birds.

Central in the discussion were the various cleaning agents and methods that have been used both experimentally and in the field. This includes three general classifications of cleaning agents: (1) Soaps, (2) Hydrocarbon solvents, and (3) Flourocarbon solvents. Some of the cleaners gave obviously poor results, being either inadequate at the job of cleaning or detrimental to the health of the bird. Some of the cleaners look promising but have not yet been sufficiently investigated.

A particularly interesting cleaner is a flourocarbon solvent that can be continually separated from the oil that it dissolves off the bird and reused in a closed system. The high cost of this solvent and the need for specially built sophisticated equipment are considerable drawbacks toward the widespread use of such a closed system. It works fine in the laboratory, however.

Some of the hydrocarbon solvents are too highly flammable to be considered for general use following an oil spill yet seem to be quite effective at removing oil without harm to the bird.

Through the efforts of Forrest Smith of Clean Bay, Inc., Drs. Pittman and Roitman, Dr. James Naviaux of the National Wildlife Health Foundation, and William Clark, valuable preliminary investigations have been made that IBRRC has plans to help further. We also will be starting some original studies with cleaners that are presently untested.

--David Smith

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TRAINING SESSION

On June 10, IBRRC conducted an in-house training session for experienced bird handlers who worked at the Richmond Bird Center last year. The purpose of the session was to bring these people up to date on the latest findings regarding the care of captive wild fowl as well as to review earlier techniques.

Bill Clark of the Wildlife Investigations Laboratory, Dept. of Fish and Game, gave an interesting talk on avian botulism and its control, accompanied with slides. Dr. John Bodle dissected a duck to illustrate a brilliantly detailed lecture on anatomy. Mal Raff and Dr. Bodle presented considerable information on the use of medicines. Dave Smith discussed current developments in cleaning agents and techniques for the removal of oil from birds. April Fletcher briefly summarized the status of governmental oil spill contingency plans around the country and how they relate to our program. Nearly everyone participated in a discussion of general care, feeding and rehabilitation of different types of water birds.

By such periodic sessions coupled with intensive classes for the beginner, we hope to maintain a pool of skilled personnel that can be drawn upon as needed; e.g. in event of an oil spill or botulism outbreak.