

National Audubon Society

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THE STILT

BRIDGERLAND AUDUBON SOCIETY

Vol. 17, No. 3

November 1988

MEETING CALENDAR

Thursday, November 10: Regular BAS monthly meeting, 7 p.m. in the Logan City meeting room, 255 North Main Street. Featured speaker will be Mark Stackhouse of Tracy Aviary. See the related article in this issue of *Stilt* for details.

Thursday, November 16: BAS Board meeting, 7 p.m. in the Logan Library conference room, 255 North Main Street.

FIELD TRIP CALENDAR

Monday, November 5: Attracting Birds To Your Home. Meet at 9:00 a.m. at the home of Allen Stokes, 1722 Middle Hill Drive (Saddle Hill Drive is about 950 North, east of the golf course, and is only two blocks long). This will be a visit to three homes to see various types of feeders, their locations and the types of foods to attract a variety of winter birds. Bring binoculars to identify birds using the feeders.

Monday, November 12: Fall Migrants and Gulls of Cache Valley. Leave at 8:00 a.m. from the southwest corner of Fred Meyer parking lot and return around noon. The group will go to the sanitary landfill and the sewage lagoons to observe gulls at a time in the year when unusual gulls appear. Afterwards we will go to the Benson area to look for hawks, owls and other birds.

Monday, November 19: Geology of Cache Valley. Liddell, Professor of Geology at USU, will conduct

Audubon Society meets the second Thursday of November through May, in the Council Room of the Logan Library. Meetings start at 7:30 a.m. Planning Committee meets every third Thursday through May, in the Logan Library at 7:00 a.m. to attend.

Cynthia Kerbs, 752-3251
Jillyn Smith, 750-1359
Scott Cheney, 753-1893
Betty Boeker, 752-8092
Bruce Pendery, 753-3726
Sally Jackson,
Al Stokes, 752-2702
Al Stokes, 752-2702
Tom Gordon, 752-6561
Mike Jablonski, 753-2259
John Wise, 245-6695
Scott Cheney, 753-1893
Rich Campanella, 752-3689
Steve Cannon, 752-1209
John Barnes, 563-3910
Jon Wraith, 752-0743
Larry Ryel, 753-8479
Dianne Browning, 752-5946
Ron Ryel, 753-6077
John Sigler, 753-5879

this trip and make you feel as if you are walking through the distant past, searching for fossils along the shores of ancient seas. Meet at 8:00 a.m. in room 202 of the Nutrition and Food Science Building on the USU campus (12th East).

HERE COME THE POLYBAGS!

A small number of the November issue of *Audubon* magazine will, as an experiment, be wrapped in a new polybag containing some form of cornstarch to make it more readily biodegradable. NAS will be testing it to see whether it works and if it is economically feasible. You can recognize the different wrapper by its diminished transparency and slightly rougher texture than the polywrap NAS has been using. NAS promises to keep us posted on further developments.

BAS MEETING: FOR THE BIRDS

The November 10 BAS monthly meeting will be for—and with—the birds. Featured speaker for the evening will be Mark Stackhouse of the Tracy Aviary in Salt Lake City. Mark will have several live birds with him for the meeting, and will present a slide show on the role of the aviary in conservation and education, explaining both the aviary's current programs and plans for future programs.

Occupying 12 acres in the southwest corner of Salt Lake City's Liberty Park, Tracy Aviary was established in 1938 with the private donation of 200 birds and animals from Russell Tracy. The oldest public aviary in the country,

Tracy Aviary includes more than 900 birds from 240 species—the fifth largest collection of birds in North America.

Mark Stackhouse received his B.S. in range science and biology from USU. He has had a lifelong interest in birds and has worked as Tracy Aviary's community educator for three years. In keeping with that role, Mark will spend the day, before the meeting, presenting BAS-sponsored programs at local area grade schools. This will be Tracy Aviary's first visit to Logan, and we extend hearty thanks to Mark Stackhouse for his time and his birds.

The meeting starts at 7:30—don't forget to bring the kids to this one.

—Diane Browning

TETON AUDUBON TRIP

[Ed. note: Shelly Ferlin and her family went with BAS on the September 30 - October 2 Audubon trip to the Tetons. Al Stokes asked her to write about what she enjoyed most on the trip.]

We left camp early in the morning on Saturday. On our way to the Science Lab [the Teton Science School museum], we stopped to watch a herd of antelope. One buck was trying to get into the herd until the leader, on the other side of the field, saw him coming and chased him away. The group we were in stopped to look at them just being there in their natural habitat and being free. My Mom took a picture of them.

After we left the Science Lab, we passed a buffalo grazing along the side of the road. We walked around where the Teton forest fire had burned in August.

We also went to see a beaver dam, but we couldn't see any beaver. We did see where the beaver had chewed down trees, and some were really good-sized. The larger trees were left, but all the branches were chewed off. We saw the trail where the beavers slide their logs down to the river. I had never seen a beaver dam. It was exciting for everyone, and the little kids were really enjoying the dam.

Saturday evening we went to see the elk and listen to them bugle. On our way to where we were to watch for the elk, we saw a bull moose beside the road. We stopped and watched him for a few minutes. When we got to the field where we were going, we saw a bunch of mule deer. Then we walked up the road and stopped to see a large bull moose that was walking down the hillside. We saw a large elk across the fields and heard him bugle. As it got darker we could only see big black blobs moving toward us. Terry, one of the leaders, told me that the elk don't like human scent.

Even though it was cold in the mornings, we all managed to make it through two nights there. We saw several different kinds of wildlife in the Teton Mountains. It was really exciting for my Mom because she had never seen any elk or buffalo in the wild. I hope that next year I will be able to go to the Tetons and see the elk and the great wild animals.

—Shelly Ferlin

SUNFLOWER SEED IS . . . GONE

The year's first shipment of sunflower seed is soon to be delivered, and soon to be distributed. Al Stokes reports that more will probably be available come January. If you want to reserve a bag or two or three, contact Al at 752-2702. The cost will be close to what it was last year.

LOGAN CANYON UPDATE

The Logan Canyon Highway has been designated "National Scenic Byway" by the U.S. Forest Service. A few roads throughout the country have received this designation. While the designation does not contain specific guidelines limiting highway modification, it certainly supports the BAS position that Logan Canyon is a special place.

The National Scenic Byway designation is not the same as the National Scenic Highway designation, which we have advocated for several years.

—Steve Ferlin

SHARKS IN CACHE VALLEY!

That's right: Cache Valley will have sharks in December. Not the kind frequently seen around Hyrum Reservoir, however. Peter Benchley, author of *Jaws*, will narrate the next Audubon Special, featuring (you guessed it) sharks.

Although many people behave somewhat irrationally toward sharks, this Audubon Special shows that sharks are in fact a valuable resource and are no less deserving of our concern than are whales, dolphins, big cats and other wildlife. The program's theme is that we don't want to continue doing to sharks what we have done to whales and other endangered species. The gentle basking shark is severely threatened, and the great white shark—supposedly a marine predator and antagonist in *Jaws*—is remorselessly hunted by souvenir collectors.

Please tune in. The dates for this Audubon Special, which will air on SuperStation TBS, are:
Friday, December 16, 10:50 p.m. Eastern time
Tuesday, December 27, 9:20 p.m. Pacific time
Friday, December 30, 10:05 p.m. Eastern time

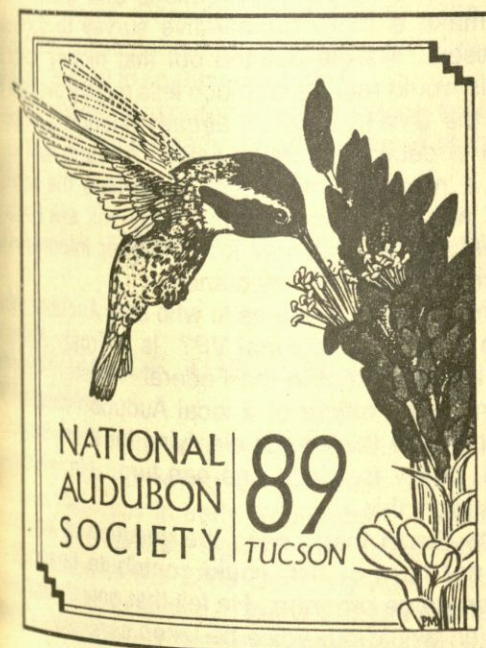
AUDUBON CONVENTION: 1989
Peter Berle has announced that the Tucson Audubon Society will be the official host for the 1989 National Audubon Convention, to be held September 11-16 at the Doubletree Hotel at Randolph Park in Tucson. The Tucson chapter has assembled an outstanding committee of chapter members from Tucson and from other Arizona chapters.

The convention's theme is "Our Southwest: Challenged by Growth." The program will focus on the complex issue of explosive growth locally, nationally and internationally, and the impact of this growth on energy consumption, resource use and our environmental future. It will highlight how Audubon is addressing the issues of public land management, loss of critical wetlands and wildlife conservation. Audubon's High Priority Campaigns will also be featured.

Considering the development problems we're facing in southern Utah's canyon country, many of these issues are tailor-made for our participation. How is the southern California demand for power going to affect the air quality in Bryce Canyon? Is drilling for carbon dioxide really the best management strategy for our wilderness study areas?

Special workshops, provocative speakers, member involvement, panel discussions, board member interaction, outstanding field trips, a theme art show, exhibits and just plain camaraderie will be the ingredients to make this convention one of the best ever. National is urging members from every chapter to attend . . . so mark your calendar for September 11-16, 1989, and be a participant in this important (and fun!) event. For more information, contact any BAS officer or Gail Turner, Convention Coordinator, 4150 Darley, Suite 5A, Boulder, CO 80303.

—TJG



A TEMPORARY VICTORY . . . AND A POSSIBLY PERMANENT DEFEAT

The good news comes from Washington, D.C. where conservationists have won a quiet victory. After months of wrangling over proposed oil exploration in the fragile Arctic National Wildlife Refuge (ANWR), House Speaker Jim Wright, an oil industry ally, conceded in a meeting with wilderness champion Morris Udall to no floor action on the Arctic development legislation for the rest of this year. Wright had learned earlier that no Senate votes were planned for the rest of the year because of the likelihood of a filibuster by those who support wilderness for ANWR.

Although the victory is not final—Wright vowed that he would be back next year, pressing for development legislation early in 1989—conservationists can enjoy the knowledge that they have successfully stood up against Interior Secretary Donald Hodel, the oil industry and some of the most powerful members of Congress.

On another front, closer to home, the Bureau of Land Management has released a proposed resource management plan for the San Rafael Swell south of Price. Not surprisingly, the plan promotes using off-road vehicles throughout the swell. Oh, well . . . it's only a desert. What's another desert? Seen one, seen 'em all, right? Besides, if the BLM's plan gets approved, we can all truck on out there with our ORVs and run us down some jackrabbits!

—Utah Sierran/TJG

HOTLINE NOTES

This summer turned out to be the season of the cattle egret. More of these elegant waders were seen this summer than in several previous summers combined. Otherwise, the hot season turned up few rarities. This fall, however, has seen some rare birds in the county. Kit Flannery reported seven species of warblers in her yard during September, including Nashville and Townsend's. An ovenbird, an eastern warbler who very rarely comes to Cache Valley, appeared at Tom Lyon's house and stayed a few days in September.

With the fall migration upon us, keep your binoculars out and the HOTLINE number in hand. If you have a bird to report or would like a call when a rare bird is reported, let me know at 753-1893.

—Scott Cheney

UTAH AUDUBON COUNCIL MEETING

September 24-25, 1988

The Council was held at Kelly Grove, a mile east of Springville in Hobbie Creek Canyon. The Timpanogos Chapter had reserved and paid for the use of a large covered pavilion with lights, running water, and spacious lawn on which to pitch tents. This made a quiet, pleasant location with Hobbie Creek running alongside our meeting place.

The gathering started at noon Saturday for lunch, followed by an all-afternoon trip to see the areas proposed for the Utah Lake National Wildlife Refuge. Two years previously Jim Coyner had conducted a similar trip when the lake was at flood level. This time the lake was at an extreme low level. The contrast was striking, with 200 yards of sandy exposed shoreline and virtually no emergent marsh vegetation left. In the absence of Jim Coyner, Knute Rife did a good job of leading the trip.

We returned to Kelly Grove for a potluck supper followed by a session around a warm campfire. Discussion continued after breakfast on Sunday, winding up by noon. The following persons attended:

Lois Clark, Lillian Hayes, Donna Peterson from Timpanogos A.S.; Cindy Cromor, Margie Halpin, Jeanne LeBer, June Rayburn, Knute Rife, Lester Short, Ray Smith, Doug Stark and Andy White-Utah A.S.; Mike Elzey-Wasatch A.S.; Bruce Pendery and Al Stokes, Bridgerland A.S.

The Timpanogos chapter felt it could not host the actual meeting other than making campground arrangements, so the Utah A.S. served in this capacity. Andy White, President of U.A.S. presided over the discussion sessions. Al Stokes offered to prepare minutes for distribution to each chapter for inclusion in their respective newsletters.

Saturday Evening Discussion Session

The first item for discussion was the setting of time, place, and topic for the 1989 Council Meeting. Al Stokes suggested that a field trip to the wetlands at the north end of Salt Lake County east of the airport and adjacent to the Jordan River with a program on the potential for developing this area for wildlife as well as recreation might be interesting. Margie Halpin briefed us on the area and its potential for wildlife. It was agreed to hold the 1989 Council Meeting there in late February or the first week of March, a time when bald eagles should be roosting in the large cottonwoods, making for an interesting field trip. The Division of Parks and Recreation has a small information center there that we could presumably use for our meetings and possibly even spend the night. Margie agreed to check into this as well as head up arranging the program. The Utah A.S. would act as host for physical arrangements but the Coordinating Committee, made up of a representative from each Audubon chapter, would meet with Margie to arrange the program. Robert Turner will be asked to attend.

Margie then told us about the possibility of raising money were presented with no conclusion. Ray agreed to delve into what suggestions have been made by other states and at the national level.

Sunday Morning Discussion
A need was expressed for a conservation directory provide names and addresses of key personnel in county, state and federal agencies to who we can turn for information and consultation. It was agreed that this should be handled by each chapter.
Andy spoke of the possible outbreak of gypsy moths in Utah and that APHIS is rumored to wish to begin spray action. We were concerned about effects on other insects and wildlife depending on these. Al agreed to contact his brother in Massachusetts as to the effectiveness of spraying, as well as a friend in Colorado where gypsy moths have only recently arrived. He will report to Jeanne LeBer who will be responsible for gathering information about gypsy moths.

The final matter discussed was the organization of the U.A.C. itself. It was agreed after lively discussion that: U.A.C. should have a coordinating committee made up of representative from each chapter and a chairman responsible for getting this committee together. A suggestion for a secretary was tabled but Al Stokes agreed to prepare a report on this meeting. There should be a notebook where records of U.A.C. meetings and actions can be kept. Specific issues should be assigned to an individual. This person will act as a chapter member and report to his/her chapter rather than to the U.A.C. coordinating committee. The practice of having a weekend meeting was endorsed. There will be a host chapter responsible for the physical facilities. The coordinating Committee, or some person(s) designated by it, will arrange the field trip and program. Current coordinating Committee members are John Bellmon, chairman, Bruce Pendery, and Knute Rife. The Timpanogos chapter should designate a member. Knute and Bruce agreed to continue to serve.

The meeting adjourned with a strong feeling that the U.A.C. has made steady progress toward stability and purpose.

Prepared by Al Stokes, Bridgerland A.S.
September 28, 1988

There was discussion as to how reliable figures were on crop depredations and whether we should make a more quantitative survey to document such losses. Margie pointed out that money to do this would mean that much less money available for work of the DWR. DWR is already financially strapped because of declining license sales. A crane hunt provide a modest enticement to replace the reduced hunting of waterfowl. Andy will ask Vice-president Bob Turner for whatever information has on crop depredation by cranes.

The question arose as to who sets Audubon policy? Is it Bob Turner as regional VP? Is it Frosty through his statement in the Federal Register? Is it a statement by an officer of a local Audubon chapter? Al Stokes told how this needs clarifying for there is a lot of N.A.S. policy to which one can turn. He will report to Peter Berle on this.

Ray Smith then posed the question of how we can contribute financially to the Utah's non-game program. He felt that only through contribution would our voice be taken seriously.

So September 18 I went back to see what was happening at the picnic site where we usually watch the spawning kokanee. Some of the fish I saw had white fins and tails as though they were on the verge of dying. I walked on upstream another mile, but saw few actively spawning fish. Others were just resting below small falls, perhaps not strong enough to make the effort to pass up above. So the peak of spawning had passed. I then walked downstream from the picnic area and almost at once saw hundreds of kokanee. Some looked spent but most were in fine color and condition.

When within a half mile of the reservoir I came upon about 40 gulls, mostly California and a few ring-billed gulls. Some were wading in the shallow water. I saw two gulls lunge at fish and actually lift them out of the water. But the violently shaking fish were able to break loose and return to the stream. One gull was working on a dead fish. Down at the head of the reservoir gulls were wading in the shallow water looking for dead and dying kokanee. There were two dead but still red kokanee washed up on the shore.

I had anticipated seeing far more dead and dying kokanee in the higher stretches of the stream, close to where they had spawned. Several white-finned fish gave me a clue as to what was happening. These fish had been holding their position in the fast water, but suddenly as they made a slight turn sideways the current swept them downstream 50 or more feet before they once again stopped. In talking later to a veteran fisherman there I learned that this is typically what happens to these weakened fish. They get swept in stages right down into the reservoir. The sandy banks of the bottom end of the stream were filled with the tracks of gulls suggesting this is where the birds were most successful in catching these dying fish.

Porcupine Reservoir this year is at record low levels, almost 50 feet below the high-water line. To my amazement the stream had cleaned itself of silt, leaving clean gravel in which the kokanee could spawn at this very low level. To be sure, should the water in the reservoir rise much, it would flood out the spawning sites with complete loss of the eggs in the redds.

I returned again on October 8, with Reinhard Jockel, three weeks after my previous visit. By then the spawning was completely over, and we did not see a single live, even weakened, fish in the stream. There were about ten dead and dried fish on the sandy banks 100 yards or less from the reservoir. Along the reservoir shore itself I saw another half dozen dead fish. Most of the gulls had left this site; of those that remained none were finding dead fish to scavenge. I wondered if kokanee decompose rapidly and sink below the surface.

We walked along the hard-baked mud shoreline and spotted a few raccoon tracks. Then we stopped at tracks with sharp claw marks and pads showing. We believe they were from mink, for the tracks went back and forth along the shore's edge as a mink might do in search of fish. We left, amazed that so many thousand fish could vanish and leave so few traces.

— Al Stokes

AFTERMATH OF THE KOKANEE SPAWNING

Many of you have gone on the Audubon field trips to observe the spawning of kokanee salmon above Porcupine Reservoir in early September. These brilliant red fish are a remarkable sight as they splash about in the shallow waters of the Little Bear, trying to establish a territory in which to spawn. I knew that the salmon all die shortly after spawning, but I had not witnessed this stage.

FOOD: THE MOST IMPORTANT ACTIVITY IN THE LIVES OF 'PUNK' JUNCOS

The hungry human teenager has his counterpart in the world of yellow-eyed juncos, but the juncos have to feed themselves.

"The junco parents kick the juveniles out when they learn to forage," says bird biologist Kim Sullivan. "The juveniles form 'punk' junco flocks, and the parents re-nest."

Sullivan, who recently took a position in the biology department at Utah State University, has studied the behavior of yellow-eyed juncos for the past five breeding seasons in the Chiricahua Mountains of southeastern Arizona. She found that the juvenile ground feeding juncos work hard and live on the edge, energetically.

Juncos nest on the ground in late April, and each nest contains three or four eggs. A pair may raise three broods in a season. Between hatching and learning to fly, 10 percent of the young juncos are lost to predators such as jays, hawks, skunks and rattlesnakes. After 3-4 weeks, they learn to forage on their own, and the parents throw them out.

"The juveniles lose weight when the parents kick them out," says Sullivan. "Forty-two percent of them die, but the ones that make it through survive as well as adults."

The juvenile 'punk' juncos, Sullivan found, feed on insects smaller than those eaten by their parents. They are less skilled than their parents in handling insects, and therefore spend much more time foraging and feeding.

"Juveniles forage more than 90 percent of the daylight hours and still lose weight," Sullivan notes. "In contrast, an adult can feed itself by foraging less than 30 percent of daylight hours. Adults who are feeding themselves and four offspring will forage 70 percent of the time."

As the juvenile birds become better bug-handlers, they choose larger insects, and begin to gain weight. Then they can think of something other than food.

"They can't begin molting until they're good at foraging," says Sullivan. "Then they start fighting among themselves to establish territories."

Sullivan received her PhD degree from Rutgers University, and has done postdoctoral work at the University of Rochester and the State University of New York at Albany. She presented the results of her studies with yellow-eyed juncos last week at the Behavioral Ecology meetings in Vancouver, Canada. Her research is funded by the National Science Foundation, and she plans to expand her studies to the dark-eyed junco in Utah and the volcano junco in Costa Rica.

— Jillyn Smith

PRETTY BALLOONS, PRETTY DEADLY

To celebrate the bicentennial of the U.S. Constitution, 230,000 red, white, and blue balloons were released in Philadelphia and thousands more were

launched from the Capitol in Washington. A few days, many of these balloons washed up from New Jersey through Virginia. Every latex balloon is released to promote celebratory events. But these colorful and innocent spectacles can have deadly consequences for some marine animals.

In the ocean, balloons—like plastic bags—float like food for creatures. Although latex is less durable than plastic, it has a tendency to break down slowly in ultraviolet light, it does not degrade in the stomachs of animals.

In September 1987, the Marine Mammal Center in Brigantine, New Jersey, found an ingested latex balloon contributed to the death of a pound leatherback turtle—an endangered species. The immediate cause of death was probably a physical obstruction of the pyloric valve and the blue nylon ribbon extending into the intestine. The turtle was severely emaciated; its stomach and intestines were empty. It is likely that the animal was suffering from starvation that it was unable to dive and feed from an approaching boat.

Inquiries around the country turned up similar findings. U.S. Fish and Wildlife Service is studying the effects of ingested plastic on seabirds. A small percentage of balloons among the plastic found in the stomachs of Laysan albatross chicks. (The researchers noted that balloons turned into a bubblegum-like mess in the albatrosses' stomachs.) Reports of balloon ingestion by sea creatures have come from stranding centers in Texas and Florida.

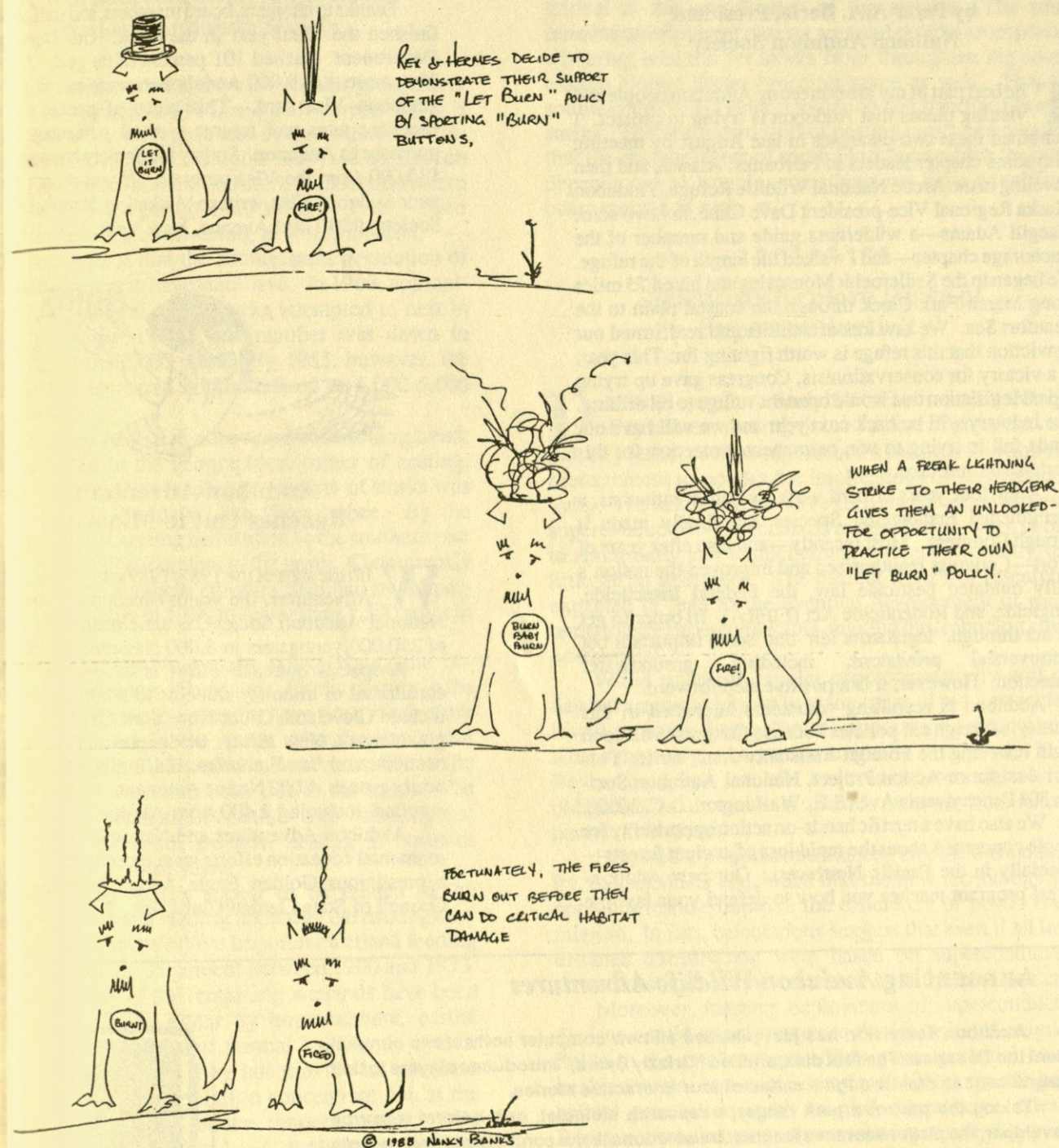
In response to these reports, the U.S. House of Representatives Assemblywoman Dolores Cooper and Assemblyman John Moran have introduced legislation that would ban mass releases of mylar, latex, or other non-degradable balloons for any promotional purpose.

According to Bob Schoelkopf, director of the Marine Mammal Stranding Center, the problem is one of education. Most groups will halt releases when told of the dangers. As an alternative, some organizations have been handing out balloons to an event. Others have substituted balloons or tethered clusters of balloons that can be pulled down again. Or flocks of tame birds are released, recovered, and used again.

Many planned releases have been stopped by a polite phone call. When you learn that a group is planning a balloon release, let them know, "What is going up is pretty deadly when it comes down."

— Peter C. and Susan Hibbard
May/June Audubon

Peter C. and Susan Hibbard are high school teachers in Jackson Township and Toms River, New Jersey, respectively, and work as volunteers at the Marine Mammal Stranding Center in Brigantine, New Jersey.



Nancy Banks must have done something really rotten in her childhood to become the tired owner of two relentlessly peripatetic Standard Schnauzers, upon whom Rex and Hermes are modeled. She squeezes in a job as the Fisheries and Wildlife Department Librarian at USU between chasing escaping dogs and filling the holes they dig under the fence.

News from NAS

Opportunities Ahead in '89 by Peter A.A. Berle, President National Audubon Society

The best part of my job is meeting Audubon people and visiting places that Audubon is trying to protect. I combined these two pleasures in late August by meeting with some chapter leaders in Fairbanks, Alaska, and then traveling to the Arctic National Wildlife Refuge. Audubon Alaska Regional Vice-president Dave Cline, my two sons, Macgill Adams—a wilderness guide and member of the Anchorage chapter—and I walked the length of the refuge. We began in the Sadlerochit Mountains and hiked 75 miles along Marsh Fork Creek through the coastal plain to the Beaufort Sea. We saw lots of wildlife and reaffirmed our conviction that this refuge is worth fighting for. This year, in a victory for conservationists, Congress gave up trying to pass legislation that would open the refuge to oil drilling. The industry will be back next year and we will have our hands full in trying to win permanent protection for this world-class resource.

After four years of hard work by conservationists, a strengthened Endangered Species Act finally made it through Congress. Most recently—and also after years of effort—Congress reauthorized and improved the nation's badly outdated pesticide law, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). In order to get the act through, legislators left out some important but controversial provisions, including groundwater protection. However, it is a positive step forward.

Audubon is recruiting volunteers interested in this country's foreign aid policies because Congress will soon begin rewriting the Foreign Assistance Act. Write: Foreign Assistance Action Project, National Audubon Society, 801 Pennsylvania Ave., S.E., Washington, D.C. 20003.

We also have a terrific hands-on action opportunity for people concerned about the rapid loss of ancient forests—especially in the Pacific Northwest. Our new Adopt-a-Forest program teaches you how to defend your favorite

places in national forests. Volunteers are now mapping, investigating, consulting with local officials, and saving trees. For more information, write to Brock Evans at the above address.

Thanks to chapters, board members, and volunteers, the Society finished the fiscal year in the black. Our Department reached 101 percent of its goal. On 31st, more than 9,000 Auduboners were issued an Audubon Visa card. This piece of paper provides excellent rates and returns a small percentage of the purchase to Audubon. So far, the Society has received \$30,000 from the Visa program. If you have your Audubon Visa, write to Marketing Department, National Audubon Society, 950 Third Avenue, New York, N.Y. 10017.



Audubon Adventures Reaches Out to Minorities

With the start of the 1988/1989 school year, Audubon Adventures, the youth education program of the National Audubon Society, is anticipating the enrollment of 250,000 youngsters in 8,000 classrooms.

A special outreach effort is expected to enroll a high percentage of minority students to 30,000 classrooms. The program includes Cleveland, Ohio; New York City; Newark, New Jersey; Bridgeport, Connecticut; and San Francisco, California. Audubon Adventures also reaches out to minority groups, 4,000 Native American children, and 2,400 from Alaska.

Audubon Adventures and National Audubon Society environmental education efforts were recently honored with a prestigious Golden Eagle Award from the Council of State Garden Clubs, Inc. ■

Endangered Storks Make Tentative Gains By Tom Bancroft, Research Biologist National Audubon Society

Wood storks were listed by the federal government as endangered in 1984, and their current status is a concern to many biologists and conservationists. Recently, a team of Audubon biologists analyzed the data on breeding populations of the wood stork in the southeastern United States for the period 1959 through 1985. Their analysis provides some interesting new information.

The best news is that the southeastern population of wood storks appears to have stabilized. In 1960, approximately 10,000 pairs of wood storks attempted to nest in Florida. In the late 1970s, that number was down to between 2,500 and 5,000 pairs. By 1985, however, the population had increased and stabilized at 5,000-6,000 nesting pairs.

The analyses have also uncovered a disturbing trend: a northward shift in the geographical center of nesting. In 1958-1960, the breeding population of storks was centered south of Florida's Lake Okeechobee. By the 1980s, the center of nesting had shifted to the southern part of Volusia County, 130 kilometers to the north. Concurrently with this shift, the southern colonies declined by 84 percent, from 8,800 pairs in 1960 to fewer than 1,500 pairs in 1985.

Two factors seem important in explaining the observed shift in the center of breeding. Storks nesting in the northern part of the range appear to have been much more successful than those in the south, with the result that annual production has exceeded annual mortality in the north, while the reverse has been true in the south. The first factor is that adult storks and/or their offspring that nested in the south are now nesting in northern colonies in some or most years.

Both of these factors appear to be related to the availability of adequate feeding habitat in the two regions. In the south, the acreage of five important wetland feeding habitats decreased by 35 percent between 1900 and 1973. Furthermore, many of the remaining wetlands have been modified dramatically, either by impoundment, partial drainage, or manipulation of normal hydrologic cycles. These managed wetlands may not provide an adequate food base for storks if they fail to concentrate fish at the proper water depths and in the proper seasons. The northern region, on the other hand, contains many independently functioning small stream systems, lakes, marshes, and farm ponds that provide many feeding options for the storks. The availability of favorable feeding habitat may explain the greater success of the northern population.

Although south Florida no longer supports the number of breeding wood storks it once did, this region may still be critical to the preservation of the species. The south remains an important nesting area and may be an important wintering location for storks from throughout the southeastern United States breeding range as well. That the southeastern wood stork population has stabilized is reassuring. The northward shift of nesting sends us a message that the environments of south Florida on which the stork depends are in trouble, something we have heard from other species as well. ■

Scientists Explore Risks of Superconductivity

Dr. Jan Beyea from Audubon's Environmental Policy Department recently joined a host of physicists and industry leaders at Robert Redford's Institute for Resource Management to ponder the implications of superconductivity. The last few years have seen enormous advances in superconductors—specialized materials that, when cooled to abnormally low temperatures, conduct electricity with little or no resistance. The current frenzy of research is expected to lead to the eventual development of room-temperature superconductors, making the technology more economical.

While scientists predict superconductivity will one day have a major impact in many areas of modern society, it will be some time before its applications reach a scale where they might be environmentally disruptive. Thus, Beyea feels that we still have an opportunity and an obligation to channel its growth into environmentally benign directions.

Despite the promise of enhanced electrical conductivity, the scientists concluded that the new technology will not significantly improve the efficiency of power transmission. In fact, calculations suggest that even if all long-distance transmission were based on superconductors, power losses would be decreased by only three percent.

Moreover, massive deployment of superconducting devices would greatly increase the intensity of magnetic fields in the environment. This poses potential human health threats, and could interfere with magnetic-based animal orientation, such as bird migrations. Clearly, Beyea asserts, further environmental research will need to proceed as the new technology evolves. ■

Announcing Audubon Wildlife Adventures

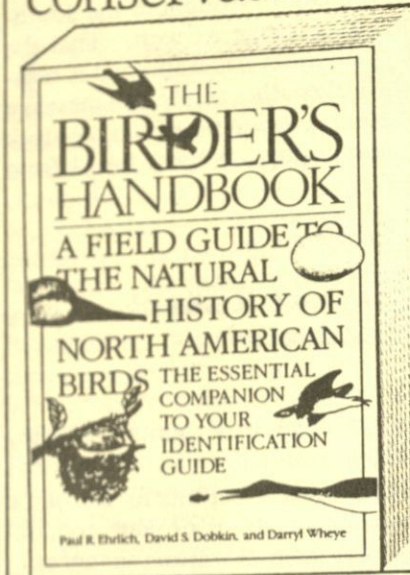
Audubon Television has just released all-new computer software to complement the TV series. The first disk, entitled "Grizzly Bears," introduces players to that magnificent animal through a series of four interactive stories.

Taking the part of a park ranger, a research biologist, or a natural resource developer, the player searches for creative solutions to the conflicts between people and the bear. Additional software in the Audubon Wildlife Adventures series includes "Whales," "Sharks," and "Poacher Patrol." Each title comes with a curriculum guide with expanded activities. "Grizzly" is now available from your local software retailer; "Whales" will be out next year.

For more information, contact: Christopher Palmer, Vice-president and Executive Producer, Audubon Television Programs, 801 Pennsylvania Avenue, S.E., Washington, D.C. 20003; (202) 547-9009.



"Required reading for all birders, naturalists, and conservationists."—David S. Wilcove, Ecologist, The Wilderness Society



"Serious birders will gain enormously from this extraordinary new guide."
—Roger Tory Peterson

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Keeping the Birding Faith

While most people are still making plans for Thanksgiving dinner, Auduboners have already begun counting the days to the 89th annual National Audubon Christmas Bird Count. The Christmas Bird Count, or CBC, is one of the most enduring and popular among Audubon activities—or for that matter among *all* outdoor volunteer activities in America. Last year, more than 40,000 people participated in the count. And the CBC is for *everyone*—whether you have vast birding experience or none.

What accounts for the CBC's success? Well, for starters, it's just plain fun—an event of unparalleled camaraderie, a time to see old friends and swap stories. For many, it's a first chance to learn the joys and skills of birdwatching. For others, it's high-power, competitive birding at its best.

Moreover, taking part in the Christmas Bird Count means contributing to a vital scientific endeavor. Each year, National Audubon Society collects the results from the more than 1,500 counts—from Alaska to South America, Bermuda to the Pacific—and publishes them in its esteemed ornithological journal, *American Birds*. The resulting data base is one that is tapped over and over again by scientists and researchers worldwide to uncover important avian population trends. There is simply no better source for this information.

To participate in this year's CBC, contact your chapter leader, or write *American Birds*, Christmas Bird Count, 950 Third Ave., New York, N.Y. 10022. Good birding!

Birders Hail New Field Guide

The *Birder's Handbook: A Field Guide to the History of North American Birds* is a new addition to every birder's bookshelf. The 1988 edition, previewed in *American Birds*, National Audubon Society's field-birding journal, the *Handbook* is a compact enough to earn the "field guide" title. The pages are a cornucopia of information, including species accounts, key information on each bird's biology, eggs, habitat, conservation, etc. The *Handbook* also contains fascinating essays on related topics, such as migration to brood parasitism. The extensive cross-referencing and bibliography make this book an invaluable resource.

Species accounts appear on left-hand pages; they summarize with words and pictures key information on each bird's biology, eggs, habitat, conservation, etc. The *Handbook* also contains fascinating essays on related topics, such as migration to brood parasitism. The extensive cross-referencing and bibliography make this book an invaluable resource. *The Birder's Handbook* costs \$14.95 in bookstores. ■

Information, Please

By Barbara Linton and Ann Stevens
National Audubon Society

K. You've always wanted to know the answer to the question, "Are there special contact lenses for night-birding?" Who do you call for the answer? You could call your friendly chapter bird expert. Or, you could call Information Services at the New York office of National Audubon.

Information Services handles a whopping 30,000 inquiries a year, from queries about bird behavior to requests for background materials on acid rain. During the past year, about half of the calls and letters come from students, mostly in the elementary grades. The topics of interest include wildlife, endangered species, pollution, and other environmental issues. We fulfill hundreds of requests from teachers who are looking for educational materials for classroom use. We provide reading recommendations, information on the Society and its programs, and back issues of *AUDUBON* magazine.

And then, of course, there are birds. The general mail consists of questions about bird feeding and bird species—favorites are bluebirds, purple martins, and hummingbirds. Of the approximately 6,000 phone calls received annually, problems with pigeons and woodpeckers are scattered throughout the year, while calls about injured and sick birds predominate in spring and summer. When it comes to the feathered tribe, no question is too silly. One caller even wanted to know if birds will eat spaghetti with meat sauce.

Besides answering questions, Information Services helps some callers to other organizations that have a specialty in a specific area. We help newspaper and magazine reporters check facts, and—as "communication coordinator" for Audubon, we distribute brochures to our regional offices, sanctuaries, and chapters. If we can be of assistance to *you*, please drop us a line! ■

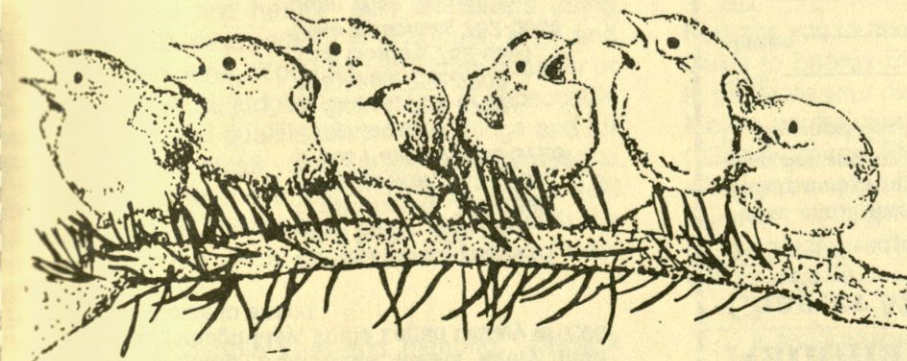
Record-breaking Birdathon

The 1988 Birdathon is history—and what a success! One-hundred and sixty-one chapters raised a total of \$200,900—both record-breaking figures. More than a thousand people went birding; nearly 700 birds (mostly songbirds) were awarded to 90 chapters. Top prizes went to Zeiss, Leitz, Nikon, Minolta, and Swift cameras; Roger Tory Peterson field guides; Easton Press; Gates Gloves; Pacific Coast Feather Down Company; Audubon Sanctuary vacations; and Audubon Sanctuary vacations. Congratulations to all!

More birdathon records: the Dallas chapter raised \$259,000 by sending 11 teams out to bird. The Everglades, Florida, chapter raised \$15,000. The Clara Valley, California, chapter had the most pledges: \$750 per species!

One of the most important reasons for the success of this year's Birdathon was the fact that 50 percent of the proceeds went to the program or office of their choice while the other half for their own conservation activities. This can bring the money as close to home as possible, for example, or an Audubon sanctuary. Attracting sponsors and raising money is a lot easier when you can tell folks where the money is going.

Next year's Birdathon is expected to attract 100 chapters and to see great increases in funds (and fun!) raised by all. Go for it!



Barbara J. Breen

AUDUBON and Activism Work for Each Other

Readers of *AUDUBON* usually enjoy the magazine's beauty and the elegance with which it presents environmental topics. But activists should not forget that the magazine is also one of the finest political tools available. During the past year alone, the magazine has run more than a dozen articles focusing on the National Audubon Society's High Priority Campaigns, including six on wetlands, two on acid rain, and three on old-growth forests. The entire May issue was devoted to the Arctic National Wildlife Refuge. The magazine also covered a broad array of other topics of NAS concern, including pesticides and international issues.

AUDUBON does more than provide nicely packaged information, however. It is also a vital tool for effecting change. For example, Washington lobbyists used the May issue on the Arctic Refuge to reach Capitol Hill, and the magazine's thorough analysis of the financial loss that clearcutting of Alaska's Tongass National Forest means to the federal government was bound to recruit budget-conscious congresspeople into the environmental camp.

Look for the upcoming March issue focusing on the world's oceans, and a spring issue about the problems of the Platte and Rio Grande rivers. Expect, too, more vital information on acid rain, wetlands, and other crucial issues. When honing your weapons for the next battle, don't forget that one of the sharpest tools at your disposal is *AUDUBON*.

Activists who want to do even more—to get behind the scenes and into the fray—can join Audubon's Activist Network. The network gets you a subscription to the bimonthly newsjournal of environmental issues, *Audubon Activist*, and puts you on the mailing list for Action Alerts on especially urgent issues! You also receive National Audubon's Hotline number for up-to-the-minute news. For membership in the Activist Network, send \$9 to Audubon Activist, 950 Third Ave., New York, N.Y. 10022.