



THE STILT

BRIDGERLAND AUDUBON SOCIETY

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March 1990

WHITE PELICANS IN CACHE VALLEY

If they aren't here yet, they will be soon. First recorded sightings of white pelicans on Great Salt Lake (and Cache Valley) are usually dated mid-March.

White pelicans in northern Utah nest colonially on Gunnison Island in the north arm of Great Salt Lake. They forage primarily in the freshwater marshes of Bear River Bay, former home of Bear River Migratory Bird Refuge, but are daily visitors to Cache Valley.

Carp and other "trash" fish, which inhabit shallow water in lakes and marshes, are the mainstay of the white pelican diet. Unlike brown pelicans, whites don't dive from the air after prey. They dunk. Frequently, they feed in cooperative groups, either encircling fish and concentrating them by closing in, or, battalion-like, herding fish against a barrier of vegetation or a shoreline, filling their gular pouches as they go.

(Incidentally, feeding pelicans were oblivious to me during my pelican studies. I could even get out of my truck and walk around. At all other times, however, I found them to be extremely sensitive to my presence. If you want to watch pelicans up close, find a feeding group.)

Males share nesting responsibilities with females, and adults travel to and from the island in small to large flocks using thermal updrafts to gain altitude. Pelicans can be seen in these "thermallings" groups daily, either against the Wellsvilles and Promontories or over flatlands.



The Gunnison Island pelican colony has traditionally been one of the largest and most stable breeding colonies in North America. The flooding of 1984-86, however, has affected nesting success. The effect of the flooding was insidious. Though much of their traditional foraging habitat on the south end of Great Salt Lake was destroyed, foraging habitat, and fish, in Bear River Bay increased. And so did the pelicans. Whereas the breeding colony on Gunnison Island had remained fairly stable at around 3,000 to 6,000 breeding adults for 50 to 75 years, Don Paul, Division of Wildlife Resources, reported an astounding 16,000 breeding adults during the spring of 1987.

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CALENDAR

MEETINGS

Monday, March 19. BAS Conservation Committee meeting. 7:30 p.m. 730 Hillcrest, Logan. Subjects: Water Conservancy District, Fremont Dam, Crane Hunt.

FIELD TRIPS

Saturday, March 3. Annual Bald Eagle Trip. Intrepid hikers can make the 1 1/2- to 2-hour climb to a lookout on the north side of Willard Canyon for close looks at bald eagles and occasional hawks. Others may view the eagles from near the parking area at the canyon's mouth. Spring comes early to the southwest-facing slopes. We should see mountain bluebirds, honeybees searching nectar at the early-blooming wildflowers, and perhaps a few ground or rock squirrels. Leave at 10:00 a.m. from the southwest corner of Fred Meyer's parking lot. Return flexible. Bring lunch, warm clothes and boots suitable for hiking through snow. For additional information call 752-2702.

Saturday, March 24. Landscaping for Birds. Craig Johnson, Professor of Landscape Architecture, will lead this trip to several homes in Logan to garner ideas on what plants will attract birds and also butterflies. There will be some opportunity to observe birds at these homes, so bring binoculars and dress warmly. Leave at 1 p.m. from the rest area on Highway 89 south of Logan Golf Course and return about 3 p.m.

Friday/Saturday, April 6, 7. Grouse Courtship. This ever-popular camping trip will go to Curlew National Grasslands in southern Idaho just north of Snowville, Idaho. Chance to see both sharp-tailed and sage grouse on their dance grounds as well as other wildlife. Camp at the Forest Service Stone Campground Friday evening and get up before dawn to go to the dance grounds. Return to Logan early Saturday afternoon. Advance reservations required. Call Sally or Rob Jackson at 753-4208, evenings, or Sally, 750-2459, workdays.

Saturday, April 21. Shorebirds at Amalga Barrens. This will be the peak of the northward shorebird migration on the famous Amalga Barrens, and a time when these difficult-to-identify birds are in full breeding plumage. In addition there will be waterfowl, cranes, swallows and other marsh birds. Leave at 1 p.m. from the southwest corner of Fred Meyer's parking lot and return by 5 p.m. Wear warm clothing—The Barrens is usually windy.

Saturday/Sunday, May 12, 13. Bear River Canoe Trips. An easy 15-mile paddle downriver from Trenton to Amalga with stops to see the great blue heron colony as

well as great-horned owls. Lots of beaver activity and a great variety of birds. Two separate trips—one Saturday, the other Sunday. Call Al Stokes beginning May 1 at 752-2702 for reservations and arrangements for canoes. Registration is limited to ten canoes. All welcome including single persons.



Saturday, May 26. Canoeing the Little Bear River. An easy two-hour paddle down Spring Creek and back up the Little Bear River. This trip passes beneath a great blue heronry and through lots of beaver activity, sandhill cranes, marsh wrens and other birds. Two separate trips—one leaving at 8:00 a.m. and one at 4:00 p.m. Reservations required. Call Al Stokes at 752-2702 starting May 14.

WELCOME, NEW MEMBERS!

Brian Atkinson, Logan
Leanna S. Ballard, Logan
Lee Brinegar, Salt Lake City
Mrs. Christine Beorchia, Smithfield
Richard A. Brown, Montpelier
Chuck and Nancy Carpenter, Wellsville
Ravi Narayana Chavali, Logan
Christopher Chicadus, Logan
Kurt Gtkecht, Logan
Debra Harpe, Logan
M. F. Hendricks, Preston
Kenneth F. Jenner, Logan
Dean Liechty, Logan
Chris Pehrson, Logan
Brady Phelps, Logan
Laura Riggs, Logan
Bryan Shaw, Logan
Rebecca Stewart, Logan
Duane Thorn, Sandy
Dan and Kendra Warren, Logan

PELICANS

From page one.

Not until a year after precipitation levels began to drop did the flooding start to take its pelican toll. With the slowing of freshwater inflow into Bear River Bay, salty GSL water began to intrude, overtopping crumbling dikes which had formerly protected freshwater habitats. Fish populations were decimated. Don Paul reported that in the spring of 1988, adults returned in numbers similar to 1987, but by mid-summer pelicans on Bear River Bay had essentially vanished. The last stronghold of GSL fish, and pelicans, had succumbed.

Pelicans won't be as common around here as they were during those times of good eating. But populations will increase in time.

— Anne Wallace Flannery

HOTLINE

The most exotic report of the month is undoubtedly a redpoll at Al Stokes' feeder. Larry Ryel noted one female and two male hooded mergansers at the 20-20 pond in early February. Jack Green called in to say that some 10 redtail hawks have been seen daily near the mouth of Summit Creek Canyon east of Smithfield. Pine siskens remain a major force at local feeders. The Barrow's goldeneye still preen at the third dam on sunny days. A canyon wren still sings to the world along the south slope above the mouth of Logan Canyon.

One of the most interesting reports was nest building behavior noticed in two pair of local wintering bald eagles. Watching biologists presume that the birds are just building a practice nest, but . . . ?

— Kayo

HOTLINE NUMBERS

Kayo Robertson	750-6325
Nancy Williams	753-6268
Val Grant	753-5370

THANKS, RENEWING MEMBERS

Robert Atwood, Logan
 Mrs. Linda A. Chisholm, Paradise
 M. J. Crookston, Logan
 Kit Flannery, Hyde Park
 Mr. R. Goodwin
 William B. Hampton, M.D., St. Ste. Marie, Michigan
 A. Hofmeister, Logan
 Mr. Paul B. Holden, Providence
 Mary Hunnicutt, Hyde Park
 Mr. Reinhard A. Jockel, Logan
 John A. Kadlec, Logan
 Gayle Knapp, Logan
 Harriette A. Lanner, Logan
 Dr. E. H. Berry Laughlin, Smithfield
 Mr. Karl Launchbaugh, Logan
 Carol Loveland, Logan
 T. Clark Lyons, Logan
 Steve McOmber, Logan
 Ellen Spickerman, Swan Valley, Idaho
 Alison Thorne, Logan
 Kathryn C. Wanlass, Logan
 Chuck and Nancy Warner, San Margarita, California
 T. Schroeder C. Webb, Wellsville
 M. Coburn Williams, Logan
 Mr. James L. Woodson, Logan
 Ms. D. E. Zemlicka, Millville

CHANGE

A Matter of Perspective

I was once asked to write a book for children about change. I replied that I would know less about the topic than the targeted audience. I made the statement in jest, but a bit of reflection brought home its truth.

I have spent most of my life resisting change. I soon realized that I wasn't alone in this camp, but shared it with much of the environmental community. The folks who most strongly claim allegiance to the natural world are as resistant to change as any.

Perhaps this is because we tend to see many of the changes that are upon us as negative. Many of my most cherished memories occurred on landscapes that no longer exist. The streams, woodlots, and fields of youth are all too transient features in a world of natural succession that tends to asphalt, concrete, and steel. It is hard to look with any great enthusiasm upon holes in the ozone, global warming, vanishing species, and ever-growing accumulations of poisons upon the land, sky, and water. It is harder still to look upon ourselves as perpetrators of such change.

Still, it seems strange to me that so many of us who have attained a small awareness of ecology should so

BIRDS

fervently long for a mythical planet where things are fixed. If there is any given in natural systems it is the element of perennial and sometimes catastrophic change. The recent Yellowstone fires found us all scrambling to understand the nature of change.

Biological changes are often heralded by changes in species (Hotline material). When I was a kid it was common biological knowledge that Utah contained little habitat suitable for raccoons. Ultimately the raccoons, who never read the books, made their play and raccoon tracks can now be found in every slough from one end of the state to the other.

When I first came to Cache Valley, red foxes were rare to non-existent. Now they, too, are everywhere, and along with the raccoons may be a major contributor to the demise of some other species of wildlife, notably pheasants and nesting waterfowl. When one thing changes, everything else changes also, drastically or subtly.

Sometimes sightings of unusual species are simply results of a lost or wandering animal. Anything that moves can be anywhere. A Canada lynx was shot along the Jordan River south of Salt Lake. A wolverine was shot out on the desert near Roosevelt, Utah. Sometimes, however, new species indicate a changing pattern or trend. I recall when the first moose was seen in Utah (and promptly shot—it's obviously rough being a pioneer) along the Uinta mountains. News of the loss of these animals to poaching was sad news to many moose lovers, but the species persevered and is now common in much of the state.

Bird feeders have created major shifts not only in song bird population dynamics and distribution, but also in the lives of raptors such as sharp-shinned hawks that feed on the birds that feed on the feeders. The urban forest in the suburbs east of Logan sports a growing population of red squirrels. Bald eagles, sandhill cranes, Canada geese, starlings, and crows have all made major population changes within Cache Valley. The past few years have brought us overwintering populations of both Chinese and Carolina (the green ones) mantids. On the other side of the coin many species slip away all but unnoticed. When did you see the last valley toad? Where have all the kingbirds gone? Any bears along the Bear River?

Like the forces of wind and water that over time prove themselves supreme, even as they yield before every obstacle, wildlife is in a continual state of adaptation. Every creature that wishes to survive here changes, often before our very eyes. Patterns of behavior that seem fixed, change and meld with new conditions. Bald eagles learn to hunt jackrabbits and kill winter-weakened

deer. Coyotes learn to knock over garbage cans along dimly lit city streets. Only months after deftly eluding hunters in the high country, elk beg for handouts of hay.

Much of the strategy of contemporary wildlife management is simply to slow down and spread out the obvious human-made changes long enough for populations of wildlife to make successful adaptations. The theory is that if we prevent the clearcut, the oil field, the subdivision, the new reservoir and road from coming down at the same place at the same time, wild creatures might have a chance to learn some survival strategies.

Old Chief Seattle warned the wave of Europeans that washed his culture from the earth, to beware of perpetuating the wrong sort of changes—the kind of changes he claimed would mean "the end of living and the beginning of survival." If we wish to consider his advice it is likely a good exercise for us to become a bit more aware and watchful of the world of change that swirls about us, and to note in just what fashion we act as players in this change. To those who watch, thanks for this month's Hotline calls.

— Kayo Robertson

ADVENTURES IN BIRDLAND

Zeedle Tweet Quark!

Bird calls fascinate me. They've fascinated me since I was a youngster growing up in Southern California, where the three-syllable call of a California quail was the only sound to break a desert afternoon's tomb-like silence. "Aaa-OOO-aaa." If you've ever heard a California quail, you know that's exactly what they say. If you've never heard one, you now probably have a pretty good idea of what they sound like.

So what's fascinating? Just this: I've listened to a lot of bird calls since those days in the California desert—I mean TONS of bird calls. And I've never, not even once, heard another one I could spell. Now that's fascinating. Suppose you get abducted by a UFO or an English teacher and your captor wants you to write a 300-word essay about what those little feathered people sound like. How could you do it?

Take finches, for instance. Earlier this month the season's first libidinous house finch announced, from the top of the Colorado blue spruce in my back yard, that spring had sprung and all lady finches in the area had better guard their virtue. His sustained, complex and liquidly-melodic song floated through the cold afternoon air, causing avian swoons and rapture all about . . . but

can you spell what a finch sings? (Please note that I purposely ignored the pun potential in that last sentence.) (Swans and raptors.)

Well, I can't spell what a finch sings: I admit it freely. But some try, or try at least to describe it. From the *Peterson Field Guide*: "a bright, lengthy song, loose and disjointed; frequently ends in a harsh nasal *wheer* or *che-urr*." That's a rather good description of my late grandfather's rendition of "The Devil Among The Tailors" on the bagpipes, but scarcely what I heard from the finch.

Or like this: "peter peter peter peter," whistled. How can that be a bird song? How can you whistle "peter"? How can you even say it, without lips? And can you tell what bird it is? (Hint: it's not Peter's wife, who lisps.) Well, silly you: it's a black-crested titmouse. Or how about "zeedle zeedle zeedle zeet che"? That takes teeth! But they say it's what a black-throated gray warbler sings. I don't know.

It's not just me. Look: I'll list a few birds common to Cache Valley and then list what passes in Peterson for their songs . . . see if you can match them up:

1. black-crowned night heron
2. Wilson's warbler
3. black-necked stilt
4. northern shrike
5. ruby-crowned kinglet
6. mallard
7. red-winged blackbird
8. yellow warbler



- a. o-ka-lee-ono
- b. chichichichichichichichet
- c. tsee-tsee-tsee-tsee-titi-wee
- d. tee tee tee, tew tew tew, ti-dadee, ti-dadee, ti-dadee
- e. quark! (hint: not a quantum duck.)
- f. shek-shek, jaaeg
- g. quack, quack-quack, quack, quack-quack
- h. kyip, kyip, kyip

How did you do? If you get more than one, you're doing better than I. But then Peterson insists that the California quail says qua-quer'-go, or even Chi-ca'-go, which just goes to show you: even the experts can't spell what birds say. I can only suggest that if an alien or an English teacher demands information about bird songs, you take 'em out and plant 'em down by a stream somewhere and make 'em stop asking questions and listen. You can even bring 'em to my backyard to hear the finches or bagpipes, whichever.

By the way, the answers are: 1-e, 2-b, 3-h, 4-f, 5-d, 6-g, 7-a, 8-c.

AMERICAN BIRDING ASSOCIATION

Something for the Birders

If you bird beyond your backyard, membership in the American Birding Association may enhance your enjoyment of birding.

For over 20 years, it has been the only North American organization devoted entirely to strengthening your field identification skills, enriching your bird-finding ability, and keeping you informed about valuable resources, new publications, and top-notch equipment.

As an ABA member, you will receive

Birding, ABA's bimonthly magazine, completely redesigned with a larger format. It gives active field birders the information they need to make the tough calls, find the most elusive species, and choose the birding equipment that's exactly right.

Winning It, a lively monthly newsletter featuring the latest rare bird sightings, bird-finding information, and current birding news. *Free classified ads for members.*

Member discounts from ABA Sales on bird books, tapes, optical equipment, and accessories . . . often enough to pay for your membership with just one purchase! Same day shipment if you call our toll-free number early in the day. Open evenings, weekends, and holidays for your convenience.

Membership Directory, to put you in touch with those who share your interest in birds.

Invitation to ABA's Biennial Convention, a fun, friendly week of stimulating workshops, renowned speakers, and productive field trips with expert leaders. Locations have included Tucson; Duluth; Point Pelee, Colorado; Beaumont, Texas; Riverside, California; Bangor, Maine; and Vancouver, B.C.

Invitations to ABA-sponsored birding weekends and tours to exciting foreign and domestic hotspots, conducted by some of the continent's most experienced and bird-wise tour leaders.

Membership dues are \$24 per year for individuals, \$30 for families. Century Club, Life, Family Life, Patron, and Benefactor memberships are available. For further information, write to

American Birding Association
P.O. Box 6599
Colorado Springs, CO 80934

or call (800) 634-7736 or (719) 634-7736

or contact Bob Atwood, 752-9284 or 753-0012.

ACTION

TRACKING ON THE BENSON MARINA

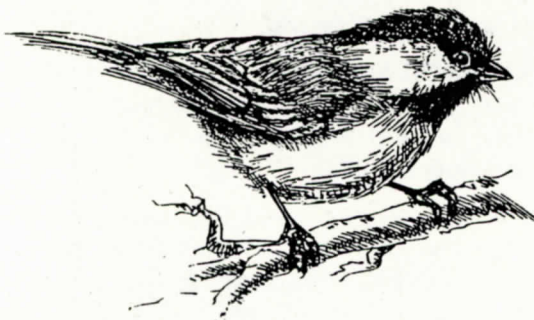
Saturday, February 10, was an overcast but surprisingly warm day. Approximately 30 people of all ages gathered around our illustrious leader, Jack Greene, biology teacher from Logan High School, and headed off to Benson Marina to ski the marsh in search of critter tracks. For several families, this was their first outing with Bridgerland Audubon.

Upon our arrival, a mature bald eagle flapped slowly upstream searching the open river water for a winter meal. Consistant with the mild temperature, only four to five inches of snow covered the marsh, so we hoofed it. Small scattered groups of Canada geese were feeding up and down the river and their excited *un-whonk un-whonk* calls continued the whole day. One nervous group of common mergansers retreated far across the open center of the ice-flanked river at our approach.

Tracks of a pheasant led us into the reeds, where marsh wren nests were discovered and one of several muskrat houses was found near the edge of the river. Numerous mouse tunnels laced trails under the snow, hiding the tiny rodents from predators. Jack showed us a set of fox tracks, looking like stitches in a hem, venturing far out onto the river ice to inspect an ice-locked snag. Small, fresh, claw-tipped paw prints led us directly to their owner, a striped skunk who, roused by the mild weather, was checking mouse tunnels in a nearby alfalfa field. A day-hunting short-eared owl was spotted cruising a river bank, the remains of one of his small, furry meals left behind on an abandoned timber.

As the temperature dropped and the wind rose, we left the marsh, having read a few of its stories.

— Veda DePaepe



SEEDS FOR SALE

Sunflower seed will be available at Sunrise Cyclery—138 North 100 East in Logan; and at the home of Elaine Watkins, 1236 East 1900 North in North Logan. Price is \$18 per 50-lb. bag. This may well be the last available seed.

WATER CONSERVANCY DISTRICT PROTESTERS STILL AT WORK

Right now there are two petition drives going on, one to create a WCD (requiring just over 5% of property owners), the other to oppose the creation of a WCD (this requires 20% of property owners). The inequity is set down by a 1940s-era state law.

Those of you who are tired of hearing about the WCD will be glad to know that we are on the home stretch. The "pro" petition will be filed on March 2 (according to the promoters), which gives us between 30 and 60 days to file the protest petition. The judge determines how many days we have. We have collected 2,000 of the 4,400 signatures needed, so there will be a lot of last-minute scrambling to achieve our goal.

Many of you have spent long hours laboring over the envelope stuffing and cataloging of petitions. For this we are very grateful. If you would like to join the last ditch effort (sitting at tables, door-to-door work), please call me at 753-7744.

Conservancy districts in Utah specialize in building dams. Which dam the local promoters have in mind is still unknown. We have learned, from Rep. Evan Olsen (our House representative from South Cache), who has been instrumental in pushing a WCD, that his personal favorite is the Amalga Barrens "dam." He believes that it will appeal to bird watchers. He must have slept through our presentation last October.

— Alice Lindahl, Conservation

1990 LEGISLATURE

At this writing, there are still four days left in the state legislative session. Many things are still to be decided, including all the funding initiatives we are concerned about. Wayne Martinson, our lobbyist, will be putting together a synopsis of the action for the April newsletter. Until then, here are some results:

WIN

Senate Bill 5, Waste Tire Recycling. Passed both chambers and awaits the governor's signature.

LOSS

Senate Bill 23, Bear River Development and Oversight. This bill passed both houses, obtained \$1.25 million in funding, without our amendments concerning oversight and requirement for looking at projects besides dams.

Our hats are off to Wayne for doing such a terrific job for us, in addition to educating us on the mysterious ways of law-making. Thanks to all of you who made phone calls and penned notes to your senator and representative at all the right moments.

— A. Lindahl

PARTICIPATION URGED IN PLANNING FOREST TRAVEL

The process of revising the Forest Travel Plan continues. There are a number of suggestions to open additional back country roads up Steam Mill Hollow, around Providence Peak, and in the Mahogany Range.

These are all areas we have worked hard to close in past years: in Steam Mill Hollow, to protect the Naomi Wilderness; in Providence Peak, to prevent erosion; in the Mahogany Range, to protect wildlife. However, unless we participate in the process now, we could stand to lose what has taken years to gain.

To participate in this process:

1. Obtain a copy of the Scoping Document from the Logan Ranger District (860 North 1200 East). This is only four pages long, and lists the issues that the various interest groups have identified.
2. Attend the open house on March 7 (8 a.m. to 8 p.m.) or March 8 (8 a.m. to 4:30 p.m.) at the District Ranger Office. Questions will be answered and public input will be accepted.
3. Submit your written comments to Dave Baumgartner, District Ranger, Logan Ranger District, 860 North 1200 East, Logan 84321. Deadline is April 1, 1990.

— Steve Flint

EIS FOR SARDINE CANYON HIGHWAY NOW AVAILABLE

You can pick up a copy of the Environmental Impact Study on the proposed highway improvements through Sardine Canyon at Bio-West, 1063 West 1400 North, Logan. We have about two months to comment, but don't put it off. There will be a public meeting during April. Stand by for more details in the next issue of *The Stilt*.

— Steve Flint

SAVE THE FREMONT

Sorry—the article is pretty long—but so is the river, and better long than short—which is also what I'm trying to say about the river.

— Nadine

Red-tailed hawks, mule deer, and hikers all have a special affinity with desert rivers. Rivers in the desert are more than water flowing through a channel. Rivers are life. Their flowing represents softness against the hard reality of rock, sand and wind. In the midst of harshness, they take on almost a spiritual, transcendent quality as givers and sustainers of life, goddesses reigning over the deer mice, jackrabbits, Indian paintbrush and bighorn sheep. One river, for me, particularly embodies this trait.

My father and mother, nearing retirement, sought the perfect place to build their dream home. After years of canvassing the state, kids, dogs and sleeping bags in tow, they knew just where that Heaven on Earth was—the Fremont River Valley, near Torrey. Indeed, in the General Store in Torrey the postcards proclaim lovingly, "Next to Heaven there's Torrey, Utah."

The first time I saw the valley, we drove for miles through empty sage and bleak late-winter landscapes. The barrenness did not prepare me for the visual feast that opened up as we drove into the long Fremont River Valley.

The valley floor is a striking, almost shocking, green against the jagged red rock spires and buttes to the north and the heavily forested mountains to the south. The southern mountains contain dense stands of ponderosa and aspen, lakes, magnificent top-of-the-world views of Capitol Reef, the Waterpocket Fold and the Henry and Fishlake Mountains.

The Fremont River is the giver of life in the valley. It meanders through pastures, leaving them lush and fertile, past pioneer cabins that gave way elsewhere to suburbs, past small towns, where time goes by slowly. The tiny towns, inhabited by sheep, horses and a few hardy humans, nestle securely among the red rocks. Along the river's banks stand dignified cottonwoods and gently waving tamarisk. The Fremont then flows peacefully on into the cathedral of Capitol Reef Park, having been undisturbed for an Earth's lifetime.

Traveling into the park you see more of the river. There is no river with colors quite like the Fremont—sage green, muddy violet, sunrise gold, earth red, butte red, evening pink, shimmering moonlit silver. The Fremont wanders, rather than hurries. It has no sense of purpose whatsoever. This is a river that invites intimacy, that

ACTION

gives your soul a rest just looking at it, that makes you cancel your plans to move on to see the "big" parks.

This ancient river is now becoming the scene of a 20th-century battle, one which pits planners of a grandiose hydroelectric project against many locals, hikers, bikers, and small feathered and furry creatures.

THE PLAN, put forward by the Wayne County Water Conservancy District, calls for construction of a three-and-a-half-mile-long dam near Torrey, a large pipeline near the border of the Capitol Reef Park, a diversion dam, powerhouse (also near the park), holding pond, desilting works, canal, and irrigation systems to develop up to 12,000 acres of cropland. No studies have been done on whether there is enough water to justify this large project.

Many environmentalists object to the proposed project on several grounds, the overwhelming reason being that the project would put an ugly, lasting scar on the Fremont River Valley, an area that is simply one of the most beautiful in the Southwest.

But since we are all professional environmentalists (right?) and don't want to base our objections solely on the basis of stunning colors, absurd rock formations, and moonrises in the gorge, we have to look at all those other less interesting factors: **OUR OFFICIAL REASONS.**

A preliminary estimate of the project runs to the staggering total of \$54 million, \$20 million for the hydro project and \$34 million for the irrigation project. There are 2,000 people in Wayne County. That means the state would have to subsidize the project. That means you and I.

After a three-year, \$93,000 study, the WCWCD has not been able to identify a single customer who would be interested in power generated by a Fremont River project. Another power producer in the area, Garkane Power, has not been able to sell all its power and has been involved in debt restructuring negotiations for some time. The Intermountain West is sitting on a large surplus of electrical power, power that is available for less money than the WCWCD could afford to sell it. There are not enough customers for the power that is produced now. What the WCWCD is proposing is an economically absurd boondoggle that would permanently scar the Fremont Gorge and cast a shadow over future tourist trade, all for a meager eight megawatts of power, compared to Garkane's (as yet unprofitable) 400 Mw output.

Water would be taken from the gorge, leaving a four-mile stretch of river with little or no water. This is land that has been included in Congressman Wayne Owen's wilderness bill due to its scenic value. The project would also create artificial and radical fluctuations in the water

volume, fluctuating on a daily basis as much as it normally does in an entire season. The beautiful vegetation that lines its banks would see severe damage.

As anyone knows, including the economically crucial tourists, the visual impact of the graceful, winding river valley with its sharp green against the red rock, is at the heart of the charm of Capitol Reef. The real economic danger is not in losing the river water, but in losing the tourists that the river brings.

There is real danger that the WCWCD will find the necessary financial backing for their plan, perhaps by strapping Utah taxpayers (us!) with the bill, even though it makes no economic or environmental sense, and even though it may cripple the tourist trade which is vital to Wayne County's economic future.

Do yourself a favor. Make plans to visit the Fremont River Gorge. (Don't forget your hiking boots!) And then, please write to protect the Fremont River. Please write today.

Write to Protect the Fremont

Help put public pressure on those individuals responsible for making decisions about the Fremont's future. Please write to:

Mr. Dwight Williams
Chairman, Wayne Co. Water Conservancy District
4 South Street
Teasdale, Utah 84773

Tell him that you are opposed to the construction of the Fremont Hydropower Project because the project would seriously scar the Fremont River Gorge and cripple the tourist trade. Question how a small scale hydropower project, producing power that isn't needed and that costs more than other available sources, is going to pay for itself.

Be sure to write "FERC Project No. 10026" on your letter; otherwise it won't be processed. Send copies of your letter to:

Director, Office of Hydropower Licensing
Federal Energy Regulatory Commission
Mail Stop 300-RB
825 North Capitol Street, N.E.
Washington, D.C. 20426

Mr. Larry Anderson, Director
Division of Water Resources
1636 W. North Temple
Salt Lake City, Utah 84116

If you would like to send additional copies of your letter to Wayne County businesses, I would be happy to provide you with a list of names and addresses. THANK YOU!

— Nadine Steinhoff

AUDUBON MONTH 1990

At National Audubon Society April is "Audubon Month." During this annual springtime event, Auduboners dedicate their efforts to an important environmental theme. In 1990 the theme is wetlands. "Audubon Month 1990" will help launch a new National Audubon "high priority campaign" to protect these fragile and endangered habitats. An instructive full-color wall poster and supporting materials will be distributed free to Audubon chapters.

"Audubon Month 1990" is special in another way. National Audubon Society is joining with thousands of organizations, schools, community groups and concerned citizens nationwide to celebrate the 20th anniversary of Earth Day. A special issue of Audubon Adventures about recycling will be dedicated to Earth Day.

The goal of "Audubon Month 1990" is to send an important environmental message about wetlands resounding throughout communities nationwide. There are many ways to observe this special event, and we hope that you will join us to celebrate "Audubon Month 1990" and Earth Day's 20th year.

— Marshal T. Case
National Audubon Society
Vice President for Education

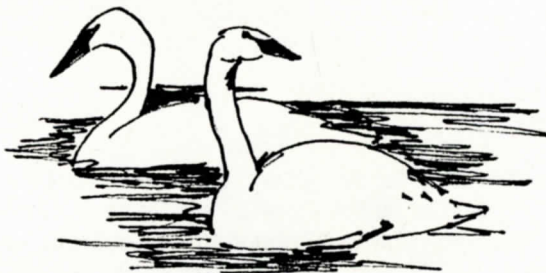
REGIONAL CONFERENCE YELLOWSTONE PARK SEPTEMBER 4-9

Our 10th regional conference plans are progressing well and we wanted to alert you to place these dates on the calendar. An exciting array of field trips will be offered; the program will obviously focus on the Yellowstone Ecosystem with its many challenging opportunities, and we also will be holding a special two-day (Thursday/Friday) leadership training session conducted by two of the top professionals in the environmental field. This training session by necessity will be limited to 25 persons or one attendance per chapter. A waiting-list will be maintained should openings occur. I expect to have a half dozen or so national staffers on hand to share their work with you.

We are indebted to the Montana Audubon Council and Janet Ellis, their new director, for helping in the multitude of arrangements. Look for the detailed information after the first of the year on lodging/meal options, field trip sign-up, registration, etc.

— Bob Turner
Regional VP

TROUBLED TRUMPETERS



The Rocky Mountain trumpeter swan should be put on the threatened and endangered species list, says the Idaho chapter of the Wildlife Society. The group, an association of wildlife biologists, filed the petition with the U.S. Fish and Wildlife Service after up to 100 swans died last winter. The birds starved when a water diversion to store water for irrigators caused the Henry's Fork of the Snake River to freeze. John Connelly, president of the Idaho chapter of the Wildlife Society, says the Fish and Wildlife Service has not officially responded to the petition. "But we've heard through the grapevine that Fish and Wildlife has decided that the petition has merit," he says. The petition details the problems faced by the trumpeter population, which winters in the Greater Yellowstone area of Idaho, Montana and Wyoming. Problems include lack of secure nesting areas, low genetic diversity and inability of weakened swans to reproduce. Wildlife officials are also negotiating with local power generators and the Bureau of Reclamation in an effort to buy water to increase winter flows in the river during drought years.

SCIENCE AT AUDUBON

At the roots of conservation and environmental action lies the need to know how nature works—how the environment functions, how plants and animals interact, and how human activities take their toll. This understanding does not come suddenly through revelations or séance. It grows from scientific inquiry, from relentless review, and from careful, reasoned analysis.

National Audubon Society bases its conservation policies on science. For this, it depends upon a diverse group of professional staff in its Division of Science and Sanctuaries. Through the Science Division, Audubon is able to independently assess the technical and scientific aspects of environmental issues so that the Society's

activism and educational programs rest on a solid intellectual base. Three elements of the Division work closely together to meld data-gathering, analysis, and policy formulation into an effective weapon for the environment.

Research

One pillar of the Division is our Research Department, composed of field scientists who investigate the world at large. Research staff total about 30 full-time employees, including 10 PhDs and six MSs. Staff scientists specialize principally in two areas: population studies of birds and other animals; and ecosystem interactions, especially between vegetation and hydrology. For more than 50 years, Audubon biologists have been gathering and analyzing biological data on avian, terrestrial, and aquatic species and have made significant contributions to scientific understanding of the life history of particular species and how environmental changes affect them. Audubon ecologists conduct resource inventories and studies on wetland hydrology, plant succession, and tree-ring analysis in an effort to advance scientific knowledge of the intricacies of ecosystems.

Sanctuaries

Sanctuary managers comprise the second leg of the Division, protecting 250,000 acres of rare habitats in the United States. Audubon buys, leases, or volunteers to patrol selected areas for the long-term protection of plants and animals. Refuge lands offer visitors glimpses of nature in all its glory and they provide relatively undisturbed workplaces for Audubon and academic field scientists investigating ways of improving current management practices of natural areas.

Policy

Underpinning both Research and Sanctuaries is the Environmental Policy Analysis Department. Here, staff analysts interpret and integrate research that is carried on around the world to develop practical alternatives to policies that are perceived as harmful to wildlife or the environment. The Environmental Policy Analysis Department is involved in a variety of projects at any one time, some of which provide direct support to Audubon's priority campaigns, such as with the Platte River effort; others concern issues of a broader nature, such as global climate change. Projects undertaken by EPAD typically draw upon a consortium of experts from outside consultants and academic scientists as well as from Audubon's diverse professional staff in Research and our New York, Washington, D.C., and regional offices. Audubon is often called upon to mediate disputes between developers and environmentalists and give technical testimony in legal cases. In addition, The

Columbia Law School Legislative Drafting Research Fund and Audubon often work together to draft model legislation on a wide variety of environmental issues.

Current EPAD Projects

Energy
Three Mile Island
The Platte River
Biotechnology
Acid Rain
Climate Change
Impacts of Oil and Gas Development on Wildlife
Indoor Air Pollution
Health Effects of Weakening the Clean Air Act
Effects of Magnetic Fields
Old-Growth Forests
Physics and the Environment
Threats to James Bay from Human Development

Audubon in Costa Rica

Audubon International
Ecology Workshop Series
"Between the Continents . . .
Between the Seas"

Tropical rainforests cover only 7 percent of the Earth's surface, yet they harbor 50 percent of all known species. Millions more species may exist as yet undiscovered in these rapidly disappearing ecological gems.

Auduboners will have the opportunity to discover the wonders of the neotropical rainforest during Audubon's International Ecology Workshop, to be held in Costa Rica, April 29 to May 9, 1990. Costa Rica, with its famous National Park System and its peaceful, democratic traditions, provides the perfect backdrop for studying the dynamics of tropical forest systems and their conservation. A major focus of the workshop will be biodiversity; there are 12,000 known species of plants and more than 800 species of birds within Costa Rica's borders.

Workshop participants will divide their time between the 7,500-acre Monteverde Cloud Forest-Preserve — home to tapirs, sloths, anteaters, ocelots, 320 species of birds (including the dazzling resplendent quetzal), and the world's only population of beautiful, but deadly, golden toads—and the La Selva Field Station deep in the lush lowland jungle. Audubon camp staff and Costa Rican naturalists will provide expert instruction throughout the workshop.

For more information on the Audubon workshop in Costa Rica or any of Audubon's other camps and workshop programs, write: Audubon Ecology Camps and Workshops, National Audubon Society, 613 Riversville Road, Greenwich, Conn. 06831, or call (203) 869-2017.

BEWARE OF THE AIR

The air you breathe in each of your 20,000 breaths during a day is hazardous to your health. The hazardous air pollutants are fine particulates, carbon monoxide, ozone, air toxics, and lead. Sources of these air pollutants are industry, and motor vehicles.

Small particulates suspended in the air less than ten-one millionths of a meter (PM10) are the most harmful to humans. PM10 also causes visibility and acid deposition problems. Major sources of PM10 in the Salt Lake Valley are automobiles and diesel trucks (66%), industries (oil refineries, Kennecott tailings piles), wood burning stoves and fireplaces, and road dust. Along the Wasatch Front, the Environmental Protection Agency (EPA) air quality standards were exceeded for PM10, ozone and carbon monoxide. Lindon in Utah County exceeded EPA PM10 standards (of 150 micrograms per cubic meter in 24 hours) for 16 days in 1988 and North Salt Lake for six days. Utah and Salt Lake Counties are two of 70 areas in the U.S. with PM10 problems. The problems are aggravated along the Wasatch Front by the temperature inversions which trap the polluted air in the valleys. These inversions are worse during the winter months.

PM10 is so small that our normal lung cleansing system cannot get rid of it. These foreign particulates in the lungs, which damage the mucous linings, make a person more susceptible to respiratory infections such as pneumonia, bronchitis, and asthma. Also related to PM10 and associated toxins are lung cancer, health problems of the heart (angina), the eye, and neurological problems (headache, poor concentration). High concentrations of PM10 most affect the elderly, people with respiratory problems, and children. When PM10 standards are exceeded, children get bronchitis, chronic cough, and chest illnesses at twice the rate as from the passive smoke of a parent who smokes one pack per day.

To solve the PM10 air pollution problem, the EPA has required states to implement a plan (SIP) with control strategies for containing pollution within federally mandated standards and rules. Utah has had three extensions on their PM10 SIP. Finally, late this past summer, public hearings were held in Provo, Orem, and Magna on PM10 SIPs. Public hearings on Salt Lake County's PM10 SIP are scheduled in February 1990. Please contact Doug Stark (277-8538) for more information on these hearings and how you can help to clean up your polluted air.

Some of the government solutions to control PM10 are enforced motor vehicle inspection and maintenance programs (I/M), restrict wood burning stoves and

fireplaces during inversions, decrease industry emissions of PM10 (Geneva Steel decrease PM10 emissions by 70%), consider alternative fuels which burn cleaner (switch from coal to gas for electric power generation), and modify road sanding and salting procedures to decrease road dust. Other solutions are highway lanes reserved for "high occupancy vehicles," higher parking fees, enforced alternate driving days, and oxygenated fuels (as used in Denver).

Things you can do to reduce air pollution include reducing your automobile travel and contacting local, state, and national government officials and leaders urging expedient implementation of good solutions. Sharing rides with others has positive environmental impacts, saves money, has social benefits and decreases congestion. Car pools or van pools can be formed by using Utah LIFT (533-LIFT) which computer matches, at no cost, riders to drivers from your living and working areas. You can get a no interest loan for a van used by six or more commuters. Short auto trips are the greatest polluters because of cold engines and inefficient fuel burning, so walk or bike these short trips. Cars are least polluting at speeds of 30 to 50 MPH, so use highways with fewer red lights or traffic-timed lights. Avoid drive-in services because idling cars are big polluters. Combine or chain work, shopping, and social trips. Perform regular auto maintenance for an efficient running engine producing fewer pollutants. To solve our air pollution problems we need cooperation, dedication, and each of us acting in a responsible manner.

Sources:

"Air Quality in Utah," by Samuel Rushforth, PhD, **Utah Sierran**, June 1989.

"Auto/Inversion," by Jani Rollins, et al, **Catalyst**, Feb/Mar 1989.

"Practical Ways You Can Reduce Air Pollution," by Jani Rolling and Susan Eyzaguirre, **Catalyst**, Feb/Mar 1989.

"New Regulations Proposed to Control Fine Particulate," **The Air Monitor**, 3rd Quarter 1989.

"Adverse Health Effects of Air Pollution," **The Clean Air Monitor**, July/Aug 1989.

— Doug Stark
Utah Audubon Society News
Dec. 1989

APRIL 19 Annual BAS Banquet

Ken Strom from National Audubon's Platte River Refuge will speak on sandhill cranes.

Plus more fun!
Plan to be there!

The Bridgerland Audubon Society meets the second Thursday of each month, October through May, in the Council Room of the new Logan City Building, 255 N. Main. Meetings start at 7:30 p.m. The BAS Planning Committee meets every third Wednesday, October through May, in the Logan Library at 7:00 p.m. Everyone is welcome to attend.

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Membership in the Bridgerland Audubon Society includes a subscription to *The Still*, as well as the *Audubon* magazine. The editor of *The Still* invites submissions of any kind, due on the 15th of each month. Send to 718 N. 200 E., Logan, UT 84321.

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National Audubon Society Chapter Membership Application

Yes, I'd like to join.

Please enroll me as a member of the National Audubon Society and of my local chapter. Please send AUDUBON magazine and my membership card to the address below.

☐ My check for \$20 is enclosed.

NAME _____

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Please make all checks payable to the National Audubon Society.

Send this application and your check to:

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