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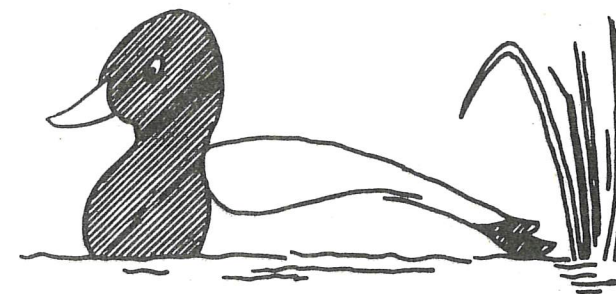
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Squawk



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MONTHLY MEETING

Tuesday, January 13, 1976 Regular
monthly meeting at 8P.M. in Charleston Museum Lecture Hall.
Topic: Great Cats of Africa
Speaker: John Henry Dick

January Field Trip

There will be a field trip to the New Magnolia Gardens on Saturday, January 31 in conjunction with members of the Carolina Bird Club. The gardens at this time of year offer a great variety of land, shore and wading birds. Ducks, especially, should be in abundance and may include blue-winged teal, gadwall, baldpate, canvasback, ring-necked and wild mallards.

We will meet at the Charleston Museum at 7:30 a.m. and form carpools to minimize traffic at the gardens. We will be met there by our leader, Susan Roche.

David Huff
Field Trip Chairman

AUDUBON WILDLIFE FILM & LECTURE

"KANGAROOS CAN'T BE CORNERED."

by LIONEL HUDSON

This film about Australia will be presented in Duckett Hall Auditorium at The Citadel, on Monday, February 2, 1976 at 7:30 PM. Tickets are now available from Alan M. Bills (873-0481) at a nominal donation of \$1.50 for adults and \$1.00 for students. The number of tickets is limited due to the size of the auditorium, so please get your orders in early.

Bird Movements in January

Arrivals

Date	Species	Date	Species
7	White Pelican	8	Great Black-backed Gull

Departures

Date	Species	Date	Species
13	Fulvous Tree Duck	24	Snowy Owl
18	Western Kingbird	31	Brant

The following have been seen at least once during January in South Carolina

Eared Grebe	Great Crested Flycatcher
Blue-faced Booby	Purple Martin
Shearwater	Black and White Warbler
Cinnamon Teal	Orange-crowned Warbler
Harlequin Duck	Northern Waterthrush
King Eider	Yellow-breasted Chat
Harlan's Hawk	Baltimore Oriole
Reddish Egret	Rose-breasted Grosbeak
Wilson's Plover	Painted Bunting
Stilt Sandpiper	Dickcissel
Razor-billed Auk	Green-tailed Towhee
Ruby-throated Hummingbird	Snow Bunting
Vermillion Flycatcher	

Observations

Date	Species	Location	Observer
Nov 22	1 Red-throated Loon	Bulls Island, Summer House Pond	Dr. W. Edmund Farrar, Jr.
Nov 29	1 White-winged Scoter	Bulls Island, Bone Yard Beach	Dr. W. Edmund Farrar, Jr.
Dec 11	1 Purple Martin	Highway 17 North near See-Wee Road	Perry Nugent
Dec 11	Red-throated Loon	Moore's Landing	Perry Nugent

The Sky-Watchers' Guide

Since the Winter Solstice, which occurred on December 22, Sky-watchers may have noticed that the evening twilight lingers a bit longer each day, which indicates that the transition to lengthening days in mid-winter is more rapid than the opposite phenomenon in mid-summer. This is caused by the fact that at this time of the year, the earth reaches its closest approach to the sun. By the laws of nature, its speed increases to avoid its being pulled into the sun by the stronger gravitational force at this point. On January 4, the earth will be nearer to the sun than at any time during the year. "Why", one may then ask, "Does our coldest weather usually occur in January"? The answer to the question lies in the fact that, during the winter months, the Northern Hemisphere is inclined away from the sun, and therefore, receives less of its heat.

In the lingering twilight, Mercury may be seen as an "Evening Star", once more, low in the west, following the sun. On January 7, it will reach its greatest eastern

to become co-sponsors and support the Senate version of the bill.

HOUSE MOVING AHEAD ON CONTROLS FOR TOXIC SUBSTANCES? Despite specific testimony continuously coming in to support the evidence that 60-90% of all human cancers are caused by environmental factors, there is still major resistance among manufacturers to legislation for strict control of toxic substances manufacture, distribution, and use. Congress has been attempting to pass legislation to control toxic substances since 1971, but industry's resistance to costs of pre-market testing of chemicals, one of the basic foundations for the controls, has halted the action. In the House, the Subcommittee on Consumer Protection and Finance is now making progress on acceptable toxic substances control legislation, based on H.R. 10318, sponsored by Rep. Bob Eckhardt (Tex).

H.R. 10318 would give the option for (but not fully require) pre-market testing of certain hazardous and potentially hazardous chemicals. It would authorize Environmental Protection Agency power to eliminate or limit use of chemicals if proven "an unreasonable risk to health or the environment"; citizens' lawsuits or petitions to EPA for enforcement of authority for controls; disclosure of health and safety information, and a priority list of substances for testing. Environmentalists are working to have the Subcommittee strengthen the pre-market screening section and other important provisions. In the Senate, S.776, a bill supported by environmentalists, is undergoing mark-up by the Senate Commerce Committee.

Today, there are some two million known chemical compounds. Thousands more are discovered each year and put into use with no pre-market screening for health hazards. Of the two-million, some 13,000 are listed as toxic, and of those tested adequately, some 1,000 have shown signs of being cancer-causing agents. "A Fact Sheet on Toxic Substances, "prepared by the Society's Washington Office, has been sent to chapter officers and is available from the Leader; see also November/December Sierra Club Bulletin, for a useful article by L. Billings and N. Buder.

Tropical Preserve. A 72,000-acre rain forest considered to be one of the biologically richest as well as one of the most beautiful remaining anywhere in tropical America has been declared a national biological preserve by the Government of Costa Rica. It lies on the seaward side of the Osa Peninsula which juts into the Pacific close to the Panama border. The Rare Animal Relief Fund (RARE), The Nature Conservancy and the world Wildlife Fund have launched a drive for funds to aid in immediate management and protection of the refuge. RARE can be reached c/o National Audubon, in New York.

Commercial Threat? A proposal to reopen the Loxahatchee (Fla.) National Wildlife Refuge to nighttime frog hunting with air boats (such hunting was permitted there several years ago) has been opposed in a letter to the Interior Department from National Audubon Research Director Alexander Sprunt IV. The boats would disturb endangered Everglade kites which sometimes nest there and use portions of the area for feeding. Sprunt says that although the hunting would be allowed as a "recreational use" it would actually be in large part commercial -- and there are other, better suited, areas available for that purpose.

To Save A Swamp. The Columbia (S.C.) Audubon Society as part of its campaign to preserve the Congaree Swamp (see July 1975 Audubon) is selling an attractive 1976 calendar with black-and-white photos showing the beauty of the swamp and information about its environmental value. And the money the calendar brings in will help finance the campaign to save the Congaree. \$2.50 from Columbia Audubon Society, Box 5923, Columbia, S. C., 29250.

AUDUBON LEADER, December 5, 1975

AT INTERNATIONAL JOINT COMMISSION HEARINGS ON THE GARRISON PROJECT, NATIONAL AUDUBON CHARGES THAT PROJECTS AFFECTING CANADA ARE ALREADY UNDER CONSTRUCTION

At International Joint Commission hearings on the controversial Garrison Diversion Unit and possible violations of the 1909 Boundary Water Treaty between the U.S. and Canada, Audubon Assistant Regional Representative Richard Madson said that projects potentially affecting Canada's water supply were already under construction, despite government claims that a moratorium on such projects was in effect. Specifically, work proceeds at the Lonetree Reservoir-Wintering Dam portion, which stores water for the Souris, Central North Dakota, and LaMoore-Oakes units of Garrison, all of which would directly affect water flowing into Canada. Madson also said that some of the most important data concerning the aspects of the project which would affect Canada would not be available until some three years after the IJC study is due to be completed (October, 1976).

Reed Warns of Net Wildlife Setback Meanwhile, at hearings on Garrison by the Conservation, Energy, and Natural Resources Subcommittee of the House Committee on Government Operations, Assistant Secretary of the Interior Nathaniel F. Reed said that "even if the 146,000 acres authorized by Congress for a compensatory wildlife program could be established, Garrison would mean a net setback for North Dakota wildlife." (This was the first high-level confirmation of the potential wildlife losses from Garrison which National Audubon has claimed for years.) Following these same hearings, Representative William S. Moorhead (Pa.), Subcommittee Chairman, released a report of the General Accounting Office showing that many Bureau of Reclamation projects greatly exceed cost ceilings set by Congress, one being the Garrison project. The GAO estimates Garrison's costs are already \$40-million in excess of its authorization.

The U.S. State Department has said it will move for a construction moratorium on Garrison if the International Joint Commission concludes that violations of the Boundary Water Treaty would result under the present construction plans.

CONSERVATIONISTS WORKING TO KILL THE \$6-BILLION PROVISION FOR SYNTHETIC FUEL DEVELOPMENT IN ERDA APPROPRIATIONS BILL; VOTE EXPECTED SOON IN HOUSE & SENATE

House and Senate Conferees have approved the conservationist-opposed provision of the Energy Research and Development Administration appropriations bill which asks \$6-billion for loan guarantees for synthetic fuel development. This boondoggle provision would offer loans mostly for coal gasification and oil shale development, two of the most environmentally risky and high-cost energy development operations now under consideration by the federal government (see 11/7/75 Leader). Environmentalists are working to have their Senators and Congressmen vote to recommit the bill (H.R. 3474) to committee with recommendations to kill the loan guarantee provision (Section 103). The House is expected to take up the bill for a vote early this month.

FOUR SENATORS BACK GOOD 'LOBBY' BILL; YOUR AID NEEDED Senators Edmund S. Muskie (Me), Gaylord Nelson (Wis), Hugh Scott (Pa), and Robert J. Dole (Ks) are circulating a "Dear Colleagues" letter seeking co-sponsors for a Senate bill identical to H.R. 8021, the National Audubon-supported bill to provide guidelines for lobbying activities of charitable and educational organizations. To refresh your memories, the bill "provides that a specific portion of an organization's budget may be expended for lobbying activities" up to \$1-million per year (See Leader 7/25/75). Some 35 senators joined these same proponents in a similar effort to get a bill in the 93rd Congress. The bill would lessen the tax restrictions on lobbying by non-profit organizations, which do not apply to business. We urge you to ask your senators

elongation, at which time it will set about an hour and a half after the sun.

By the time it is dark, three more planets will be in view. Jupiter, the most brilliant, will be near the meridian; Saturn will be well above the eastern horizon; and between the two, Mars will be located, shining with a steady, bright red glow. These three will remain in view until Jupiter sets about midnight, followed by Mars about 4:00 a.m., and by Saturn just before dawn.

From 8:00 - 10:00 p.m. in the middle of January, an hour later at the beginning, and an hour earlier at the end, the skies present a magnificent sight on any clear night. Seven stars of the first magnitude, or brighter, shine in sparkling splendor. Directly on the meridian, high overhead is Aldebaran in Taurus, the Bull. About six or eight degrees west of the V-shaped face of the Bull the faint little group of the Pleiades is located, and about ten degrees east of it are the tips of the lowered horns. Standing upright just beneath the horns is Orion in a defensive posture. From his left shoulder extends his arm, grasping a lion-skin shield. This is represented by a curve of faint stars. From his right shoulder, (bright, red Betelgeuse), he holds aloft a club. His arm and the club are indicated by very faint stars. Dangling from his belt is his sword, made up, also, of very faint stars. In the center of the sword is a faint blur of light. A telescope, or even good binoculars will resolve this into a beautiful nebula which has been identified as luminous gases in a state of agitation.

To the southeast of Orion's left knee is the Hunter's faithful dog, Canis Major. The brightest star to be seen from earth is located in this constellation. The name of the star is Sirius, which means, appropriately, "Sparkling". This is also the nearest bright star to the earth. Its distance between is approximately eight light-years.

About fifteen degrees northeast of Sirius is Procyon, the only bright star in Canis Minor, the Lesser Dog.

By once more locating Taurus, and tracing its horns to the tips, the constellation, Auriga, the Charioteer may be found. The "upper" horn of the Bull belongs, also, to Auriga. It forms the southeast corner of a five-sided figure which contains one very bright star, - Capella. The name means "She Goat", and the Charioteer is supposedly carrying it on his shoulder.

About seventeen degrees north of Procyon, two bright stars may be seen, representing the heads of Gemini, the Twins. The brighter of the two is first magnitude Pollux, and the other is second magnitude Castor.

In the early morning hours, about 4:00 o'clock, when Mars is setting in the northwest, Venus will rise in the southeast. It will continue to shine until daylight, after the other planets and the stars have disappeared, finally yielding to the brilliance of the rising sun.

Elizabeth D. Simons

WHEN IS WILDLIFE WORK IMPORTANT?

During recent issues of FIELD NOTES we have attempted to clear up certain questions sportsmen have had about various aspects of our Game Division's programs; the grouse study, our efforts on behalf of waterfowl, what we are doing about deer, and the role of biologists in relation to other Fish and Game Department activities. In this issue, we propose to review an on-going program we consider potentially the most promising and important of all our Division's efforts. Unfortunately, its benefits to wildlife are so subtle and far-reaching that it cannot be readily appreciated as are more visual projects such as new dams, new wildlife areas, ac-

quisition of properties, or newly released pheasants and turkeys. If, however, we concede the fact that wildlife cannot exist without proper habitat, and if we can then demonstrate that we have a project which over the years has prevented destruction of many thousand acres of important wetlands and upland wildlife habitat, the importance of this work should become obvious.

Our first major effort to prevent large-scale destruction of fish and game habitat occurred early in the 1960's when the United States Corps of Army Engineers proposed the construction of a major dam on the Androscoggin River which would have created an impoundment extending up to the village of Errol, thus eliminating one of New Hampshire's important rainbow trout and salmon rivers, along with many acres of important winter deer yards. Since the engineers' arguments in favor of this project were based on economics, some hard, cold facts concerning economic liabilities seemed in order. Fortunately, our staff was given the time and personnel to collect the needed information. It was passed on to various private organizations in the State who had become concerned about the potential destruction of the Androscoggin River in New Hampshire. The rest is now history; and that part of New Hampshire is now in the process of becoming a park to be enjoyed for generations to come.

Since then there have been several other efforts at radical changes to our river systems, each of which threatened our fish and game resources. The proposal to inundate the Blackwater Flood Control area in Webster and Salisbury by damming the Blackwater River would not only change this free-flowing river into a warm-water fish lake, but would also eliminate many acres of furbearer, woodcock, and grouse cover, as well as rabbit and deer habitat. This is information our staff was ready to verify. Our staff was also able to demonstrate the amount of damage to winter deer yarding areas a proposed dam on Indian Stream in Pittsburg would have perpetrated. To prevent developments such as these, cold hard facts are needed to counter those presented by the dam builders. These facts were gathered by our biologists. While used by our Department in its efforts to prevent these potential damages to wildlife habitat, perhaps these facts became even more effective when they were distributed to local residents to be used as they saw fit.

Another activity which has great potential for damage to wildlife habitat is associated with road construction. In years gone by untold acres of valuable wetlands, woodcock covers, deer yarding areas, and other valuable wildlife habitat were eliminated by the road builders. This trend was accelerated with the advent of super highways. A typical mile of such two-way highways can eliminate 43 acres of wildlife habitat. At first our Department sat by helplessly as mile after mile of new roads crept across the State eliminating forever acre upon acre of food and cover. Then came the godsend from Washington in the form of an amendment to the Fish and Wildlife Coordination Act in 1953 and in 1969, the National Environmental Policy Act. As a result of these acts and also a spirit of cooperation at our Public Works and Highway Department, staff members of the Fish and Game Department have had an opportunity to review highway routes while still in the planning stage. This has permitted our biologists to recommend modifications where severe habitat or wildlife destruction would have occurred.

For instance, during the recent road relocation of Route #302 along the Upper Ammonoosuc, the new road cut across a heavily used deer yard. Since deer are very much creatures of habit, our biologists predicted many collisions between deer and cars at this point. To prevent this, they recommend a deer fence with a system of one-way funnels to keep deer off the right-of-way, and to prevent deer from being trapped between two fences and wandering up and down the road. The Highway Department put this plan into effect; and it has been working very well.

Our Biologist found that the Route #101 by-pass at Milford will have considerable impact on fish and wildlife habitat. This area is one of the few remaining places in New Hampshire where the New England cottontail can still be found. To prevent elimination of these rabbits, the Highway Department has agreed to follow a series of recommendations proposed by our game biologist to retain cottontail habitat in this area. In former days such efforts on behalf of wildlife were unheard of.

Another continuing source of danger to wildlife habitat, one that has eliminated many thousand acres of food and cover in recent years, is posed by private developers. By pointing out potential damage to developers, our game biologist is occasionally able to get plans modified sufficiently to minimize such harm. Often however, developers place profits in dollars above all other considerations. Here our biologist has but one recourse, namely, to alert a concerned citizenry. An aroused public can at times be an extremely effective deterrent to those who want to place their own financial well-being over that of the public's interest. A frog, duck, and furbearer marsh at the southern city limits of Concord bears mute testimony to this fact.

Two years ago it was suddenly slated to become a shopping center. Just as suddenly the citizens of Concord realized that our few remaining wetlands have other values which in the final analysis could mean more to them and their children than an additional shopping center. The marsh with its furbearers, its ducks, and its frogs is still there.

Not so successful have been some of our other efforts to prevent damage to wildlife habitat. Sometimes developers have had so much of an investment in their project, and were so far along with their plans, that it became economically unfeasible for our biologists to press for changes in plans. The elimination of an important deer yard at the Eastman development in Grantham was a case in point. By pointing out to these people the effect their bulldozers, and roads, and houses was having on an important attraction to potential buyers, even greater damage was prevented. The Mt. Washington Development at Brettonwoods, the Boise-Cascade Development on Lake Tarelton in Piermont, and numerous other such ventures have all come under the restraining influence of our biologists.

Finally, today over 185 towns in New Hampshire have Conservation Commissions, composed of citizens who for the most part are actively interested in conserving important environmental features of their respective towns. All too often, however, when the members of these Commissions are suddenly confronted with a pending development, they are not trained to determine whether or not such changes are damaging to the environment. For this reason our staff has offered these Commissions the services of a biologist who stands ready to give them the benefit of his training and expertise. A surprising number of towns have already utilized this service. This has resulted in the preservation of many wetlands and other important wildlife areas.

At the outset of this article, it was our contention that this part of our Game Division's efforts were potentially the most promising and important of all our programs. Down through the years Fish and Game Departments have spent untold sums to prevent poachers and game hogs from breaking game laws, or from harvesting more than their share. This has all been very important. We contend, however, that the prevention of damage to wildlife habitat is of even greater value. To apprehend a poacher may save one or several individuals of a game species. To prevent destruction of an acre of food and cover or of a wetland, can save not only a family of furbearers, of waterfowl species, or of some upland game species for that particular moment in time, but for generations to come.

That is why we consider this work of tremendous importance!

Hilbert R. (Bandy) Siegler, Chief
Game Management and Research Division

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