

reader's turn

p.o. box 504
chas'n s.c. 29402
charlestonnaturalhistorysociety

a secret best kept

Often we are blessed with many advantages and conveniences. Most, sadly, are taken for granted. As CNHS members, for example, we are extremely fortunate to have the Southeast Regional Audubon Office in Charleston. We rarely, however, give the regional office personnel any credit or gratitude for the many courtesies (large and small) and contributions (of time and money) extended to the society.

The time for recognizing Carlyle Blakeney, Polly Holden and Terrence Larimer is long over due. We are indebted to them for many things not the least of which is an occassional xerox copy and a key to the restroom!

Carlyle has graciously offered his office for the CNHS executive board meetings. Polly and Terrence happily accomodate many requests. And the list goes on! As regional workers and CNHS members, they are vital links between National Audubon and its Charleston Chapter.

Many of us can't remember a time when there wasn't a Southeast Regional Office in Charleston. We don't realize how desperately other chapters would like a regional office in their towns. To that end, perhaps the Southeast Audubon Office is a secret best kept. But, next time we call Carlyle, Polly or Terrence concerning matters great and small, let's not forget to say "Thank you".

address correction requested

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THE lesser SQUAWK

charleston natural history society



your national audubon chapter

ibis decline on drum island

by william post, carroll g. belser, peter s. coleman

The 1985 breeding season on Drum Island was a disaster for the white ibis. In 1984 we estimated that about 13,000 pairs nested on the island, but in 1985 only about 1,000 built nests.

Further bad news, in addition to the low numbers of ibis that used the island, was the fact that those that did nest had very low success. We marked 123 nests, and followed their fates from early egg stage to the time that the young climb out of the nest (15-20 days post-hatching). Only six young were produced by these nests. In contrast, in 1984, 158 nests produced 153 young.

We now believe that the reason for the poor showing by the ibis is related to the extended drought that has been occurring in the eastern United States. The diet of nestling white ibis consists of a large proportion of freshwater organisms, such as crayfish. During droughts, these prey items are usually less available. Crayfish, in particular, burrow deeper in the mud. Adult white ibis feed on salt water crustaceans such as fiddler crabs, and they also occasionally bring such food to their young, but for some reason the young do not seem to be able to handle the salt load of estuarine invertebrates.

The inability of young ibis to subsist on a diet with high salt content may be related to the physiology of their salt glands. Salt glands, found

in the head of most waterbirds, act as accessory kidneys. It may be that the salt glands of young white ibis do not function as efficiently as those of adults, or that adult white ibis are able to drink enough fresh water to dilute the salt load of their food. Keith Bildstein, Winthrop College and the Baruch Foundation, is now conducting experiments to study the relation of salt stress to growth in young white ibis.

Young yellow-crowned night herons subsist on a diet composed almost entirely of fiddler crabs (*Uca*), mud crabs (*Sesarma*), and blue crabs (*Callinectes*), so it appears that they are equipped to handle a high salt-content diet.

In keeping with our hypothesis that the drought caused the decline in white ibis productivity, the piscivorous herons all performed well this year. Fish, whether freshwater or saltwater, contain much less sodium chloride than saltwater invertebrates. For this reason one would predict that a drought would have little effect on fisheaters. Tricolored herons, which take mainly estuarine fish like killifish, did as well or better this year than in 1984, a normal (non-drought) year. In 1984, 721 tricoloreds nested on the island, and in 1985, 996. The comparative nest success was 1.7 young per nest in 1984, and 2.3 in 1985.

E

october at a glance

October - "Audubon—The Charleston Connection" exhibit
at the Charleston Museum

October 7-13 - Coastweek
October 8 - CNHS Monthly Meeting, Charleston Museum
October 11 - Cypress Gardens Twilight Walk
October 12 - Coastal Birding
October 19 - Cypress Gardens Birdwalk
October 26-27 - Santee River Canoe Trip

Boldface denotes CNHS sponsorship

the cosmic view

by dr. bill kubinec
the college of charleston

The cool crisp evenings of October beckon us to bid farewell to the summer Milky Way and its constellations of Sagittarius, Aquila, Cygnus and Lyra. Pegasus, Andromeda and Perseus are ascending in the southeast while Auriga and Taurus peek above the eastern horizon. In the north the Big Dipper rides low and Cassiopeia climbs above the pole.

Evening viewers have several astronomical treats to select. The brilliant object in the south is Jupiter. Saturn is rapidly slipping away in the west-southwest. It is about 15 degrees to the right of Antares and close to the horizon. Both planets are good objects for binoculars.

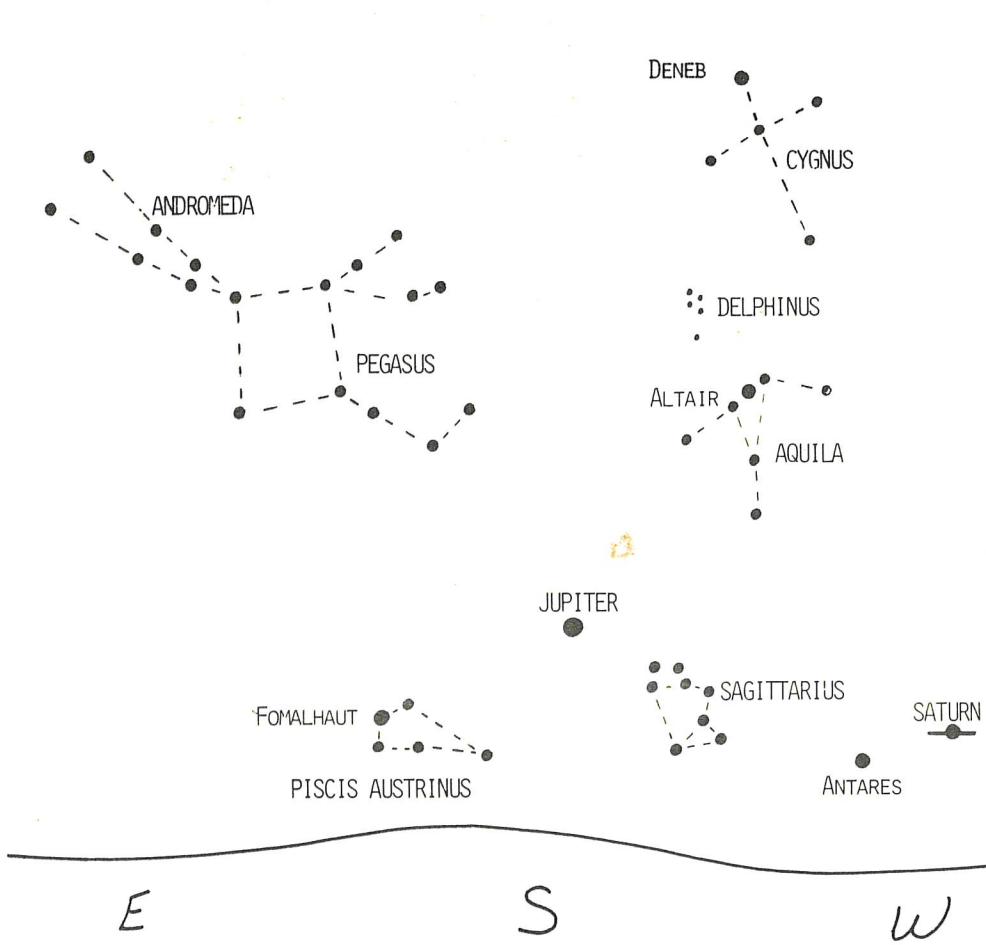
The Draconid meteor shower peaks around 11 p.m. on October 9. This shower is caused by Comet Giacobini-Zinner of recent fame. As you may recall, this was the first comet to be intercepted by a satellite. It was discovered in 1900 and has a 6 1/2 year period. Observed meteor activity indicates that most of the dust is still close to the comet rather than being spread along the orbit. Hence, in years when the comet returns around October, the shower is intense. In 1933 nearly 6000 meteors per hour (mostly faint) were recorded. This year could provide another extravaganza, for we hit the comet's orbit only 29 days after the comet passed. Do get out to see this.

Several dates of note this month: on the 4th in 1957 the launch of Sputnik 1 ushered in the "Space Age"; we fall back to standard time on the 27th; and the Full Hunter's Moon occurs on the 28th. A total lunar eclipse also occurs on the 28th; however, it happens around mid-day for us.

Early risers can catch Mars and Venus very close together in the eastern sky. On the 4th Venus is just 0.1 degree above Mars. October 20 brings the Orionid meteor shower. Observing this shower and determining the hourly rate (number of meteors per hour) has scientific value, for it is produced by old Comet Halley dust. Hourly rates this year will be compared with those seen in May, 1986 (Eta Aquarid shower of Comet Halley origin also) and next October. These observations will show whether the comet's passage effects the amount of dust along Halley's orbit. The shower peak occurs at 6 p.m. on the 20th. However, the shower can be monitored for a few nights on either side of this date. You will have to wait until midnight or earlier in the morning to look for meteors due to the first quarter moon.

Comet Halley is moving steadily toward its appointed rounding of the sun. It is about 2.3 a.u. (astronomical units where 1 a.u. equals the average earth-sun distance) from the sun. A moderate sized telescope (about eight inches in diameter) and dark skies are still needed to find this voyager. It is in the top of Orion's club at mid-month and slips into Taurus by month's end. November offers possible binocular detection with the first naked eye sightings possible in December.

All comets are thought to be dirty snowballs-

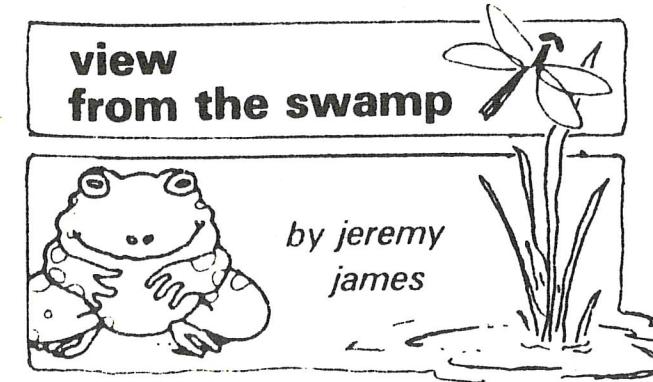


frozen gasses such as water, methane, ammonia and carbon dioxide (dry ice) peppered with dust and rocks. As this frigid body, of around 10 km diameter, plunges into the inner environs of the solar system, the sun's warmth causes the frozen gas to sublimate or turn directly into gas. Two things happen now. The body becomes immersed in a cloud of its own gaseous vapors and the dust is released. This dusty cloud is known as the COMA while the frozen snowball is called the NUCLEUS. Generally, this vaporizing begins when the comet is around the distance of Jupiter from the sun.

In late September, 1984, Halley's Comet suddenly brightened and then faded back to its previous brightness. By mid-February astronomers had detected the sublimation process at work. Spectral observations early this year indicated that Comet Halley's nucleus had a dark, reddish color. Analysis suggests that this is caused by dust with a carbonaceous composition. Carbonaceous material is found in a class of meteorites. This material is believed to be composed of almost completely unprocessed stuff which condensed from the gas cloud that became the sun and planets.

By the way, be sure to celebrate Edmund Halley's birthday on October 29 (1956).

Closer in, the sun's light and "wind" of charged particles push the gas and dust out of the coma, forming those spectacular tails. The tail shines by dust reflected light and ionized gas. Stars are easily seen through tenuous comet tails. Meteor



I don't know how many of you came out for the preview opening of "Audubon: The Charleston Connection." Plenty of people did; the museum was absolutely packed with a convivial throng. It was almost too crowded to examine the exhibit, but very easy to enjoy oneself. I am surprised at how quickly I get proud of something I had absolutely nothing to do with producing. I was just as delighted with our city, its history, and the exhibition as if I had made it myself.

charleston connection

We are very lucky to inhabit these grounds even if we have to go to Key West; Henderson, Kentucky; or Mill Grove, Pennsylvania to see an "Audubon" House. We razed Reverend Bachman's spacious dwelling and rooted out his overgrown garden for the good of the education of our children. Although nothing now exists of that comfortable habitation and garden except one elderly crepe myrtle, the Charleston museum has managed to chronicle Audubon's lengthy stays here with paintings, prints, photographs, and memorabilia. A lot of the credit for the show goes to Al Sanders, the Museum's Audubon expert. I urge you all to visit the exhibit before it closes of November 15th. Allow yourself at least a couple of hours to learn and be amazed again at the living nature creations of our premier wildlife artist and namesake.

natural history's history

One of the things President Julian Harrison wishes this year is to see written the Charleston Natural History Society's perhaps unnatural history. Although Rev. Bachman and John James Audubon (Jean Jacque to you Huguenots) did not personally found CNHS, we do have a long and interesting story that should be told. We have been closely associated with two venerable Charleston institutions: the nation's oldest municipal college and its first museum society. Several colorful personalities, assiduous nature lovers, honest citizens, and eccentrics have done their part along the way to make CNHS what it is. Just as the Ashley and the Cooper come together to form the Atlantic Ocean, the bulwark of American Ornithology stands right here. For more U.S. birds were introduced to science from South Carolina than from anywhere else, and until recently, no part of S.C. was civilized except Charleston (some would say it's still true), and since CNHS is the oldest, largest, and to my knowledge, the only bird club in Charleston, I say that logically American Ornithology rests on us. So, Julian, let's tell ourselves and the as yet uninformed world our story.

owl/tv

The National Audubon Society and the Young Naturalist foundation are launching an innovative new television series for children. Premiering on Sunday, November 3 on public television, OWL/TV will blend entertainment with humor to engender a reverence for nature and an interest in science among children, ages 7 to 11. Hopefully, OWL/TV will inspire millions of children to feel at home in and contribute to their world, a world in which they must make technology compatible with nature.

In order to incorporate OWL/TV into its regular programming schedule, the management of your community's public broadcasting station must be made aware of their community's interest in watching this excellent show for children. You can help launch this effort by asking your chapter members to call and urge station managers to incorporate the series into their weekly programming schedule.

If possible, speak with the General Manager and the Program Director and advise them that everybody in your chapter will be watching for it, and that you will do whatever you can to encourage friends, neighbors and colleagues to tune in. Writing a brief note to the same effect will also be helpful. We must attempt to convince them that their viewers care about and want to see this show.

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wildlife report available

The Audubon Wildlife Report 1985, a new publication from the National Audubon Society, traces the history of 20th century wildlife management and discusses its role in protecting our wildlife resources. A thorough reference to the nation's major wildlife management programs, the 671-page book examines the history, legislation, budget, current trends, issues and responsibilities of such agencies as the Fish and Wildlife Service, the National Park Service and the Forest Service.

The first edition in an annual series, the Audubon Wildlife Report 1985 includes authoritative accounts on federal migratory bird management, animal damage control, endangered species management, wetlands, preservation, marine mammal protection and many more subjects. Twelve chapters are devoted to individual species such as the grizzly bear, California condor, bald eagle, desert bighorn and green pitcher plant.

Diligently researched and authoritatively written, the report will be welcomed by Auduboners with a serious and active commitment to wildlife conservation.

To order, send \$16.50 (make checks payable to National Audubon Society) to Audubon Wildlife Report, National Audubon Society, 950 Third Avenue, New York, NY 10022.



observations

by perry nugent

Date	Observation	Location	Observers	Date	Observation	Location	Observers
4/15/85	Roseate Terns	Sullivans Island	Alan Bennett	4/16	15 Mottled Ducks	"	"
	1 Eared Grebe	Mt. Pleasant Causeway	"		75 Seaside Sparrows	"	"
4/16	1 Northern Goshawk	Willow Hall Rd. FMNF	Alan Bennett, Bill Drummond	7/5	1 Swallow Tailed Kite	US 17-A, Edisto River	Ed Muckenfuss
4/21	1 House Finch	near Harleyville, SC	Alan Bennett	7/13	1 Swallow Tailed Kite	McConnells Landing FMNF	Many Observers
5/10	5 Whimbrels	Seabrook Is.	"		3 Mississippi Kites	"	"
5/18	2 Marbled Godwits	"	"		Many Bachman's Sparrows	FR 212, FMNF	"
	10-12 Least Bitterns	Kinlock Plantation	"	7/20	10 Black Terns	Folly Bch., Morris Is.	C. Walters, P. Nugent
	5 Mottled Ducks	"	"		40-50 Sandwich Terns	"	"
	1 Peregrine Falcon	"	"	7/22	1 Robin	Warren St., Moncks Corner	C. Phillips
	20 Stilt Sandpipers	"	"	7/25	1 F. Redbreasted Merganser	Pitt St. Causeway	C. Phillips
	10+ Black Necked Stilts	"	"		3 Bachman's Sparrows	FMNF	C. Phillips, B. Krucke, V. Beach, P. Eppig
	2 Purple Gallinules	"	"		1 Swallow Tailed Kite	Hwy 17N	"
	2 Cliff Swallows	Moores Landing	Charlie Walters	7/27	4-5 Wood Storks	Moores Landing	"
	1 Broad Winged Hawk	Magnolia Gardens			1 Robin	Warren St., Moncks Corner	C. Phillips
5/23	4 Northern Waterthrushes	"		8/10	15 Wood Storks	Moores Landing	P. Nugent, C. Walters, V. Barnes, A. Shahid, B. Pollock
6/7	1 F. Redbreasted Merganser	St. 12, Sullivans Is.	Charlie Walters		10 Marbled Godwits	"	"
6/18	3 Wood Storks	Moores Landing			5 Whimbrels	"	"
	2 Black Necked Stilts	"			1 Curlew Sandpiper	"	P. Nugent
6/27	3 Blue Winged Teals	Bear Is.	C. Walters, P. Nugent				

comments by perry

Roseate Terns: An excellent description of these birds was given to me over the phone. I appreciate the effort Alan Bennett made to report the observations he made while birding in our area.

Eared Grebe: This bird seen by Alan Bennett was also seen the next day by Charlie Walters and Randy Glover. It was in breeding plumage and easily identified.

Northern Goshawk: The following letter includes details of this rare observation. Alan's effort is greatly appreciated.

Location:

Francis Marion National Forest. Take Forest Road 228 to the end, turn right, about 3/4 of the distance to the first forest road on left.

Time:

Approximately 9 a.m. Excellent light.

Second Observer:

Mr. William C. Drummond, 24 Elm St., Haverhill, Ma., 08130, Field Trip Coordinator of Brookline Bird Club.

Description:

While driving, I saw a large, gray, long-thin-tailed accipiter fly away at about 15 feet across the road. I stopped immediately, got out of the car, and saw

the bird swerve around and perch in a tree, watching me at about 20 yards away. The bird looked extremely fierce, with large, bold white eyebrows. Its crown was very dark, looking black. The underparts were white with fine gray streaking and the undertail coverts appeared large, fluffy and pure white. I had my binoculars on the bird for about 15 seconds when Bill Drummond (who was following at a distance) pulled up. As Bill got out of his car, the bird took off, swung behind the trees and came back over the road at about 20 feet in height and 30 feet distance. In so doing it swerved, showing its gray mantle and wings; banded, slightly rounded tail, finely edged in white; gray/white underparts; and bold white eyebrows and undertail coverts. A magnificent show.

Curlew Sandpiper: On 8/10/85, while on one of our regular Saturday birding trips, I saw a dunlin size sandpiper flying from left to right as I stood half way out on the pier at Moores Landing. It was flying along the marsh edge between me and the tree line. Through 7x binoculars the bright rusty chestnut body coloration was obvious and

striking. As the bird flew past the refuge building, it turned and flew up over some tall pines toward a tidal lagoon on the groves plantation. When it cleared the trees, a decurved bill was obvious as was the white rump. Unfortunately, the other people with me were unable to see the bird. This was the first time I had seen the curlew sandpiper in breeding plumage but there was no doubt about what it was. Charlie Walters, Randy Glover and I saw one in winter plumage 10/27/84 at Bulls Island (See January '85 Squawk). It is possible that both sightings involved the same bird.

Field Trips: In addition to the field trips scheduled in advance (and listed in the Squawk) Charlie and I usually go birding every Saturday Morning. Whether looking for rare and unusual birds or regular area residents, our intention is to study birds in a casual and fun way. Call Charlie Walters at 766-1884 or Perry Nugent at 556-3841 for information. Also, send any details of your interesting observations to Perry at 2260 Dallerton Circle, Charleston, S. C. 29407.

bird movements in october

DATE	SPECIES	DATE	SPECIES
2	Gannet	6	Black Rail
	Red-breasted Nuthatch	9	Black Tern
	Brown Creeper	14	Acadian Flycatcher
	White-throated Sparrow	15	Roseate Spoonbill
4	Yellow-bellied Sapsucker		Summer Tanager
	Western Kingbird		Wilson's Petrel
	Kirtland's Warbler		Rough-winged Swallow
	Dark-eyed Junco	5	Hooded Warbler
	Green-winged Teal		Blue Grosbeak
	Ruddy Duck	7	Lark Sparrow
	Canada Goose	8	Gull-billed Tern
	Purple Finch	9	Eastern Kingbird
	White-crowned Sparrow	10	Wilson's Plover
	Red-necked Grebe	11	Black-throated Blue Warbler
	Golden crowned Kinglet	12	White-rumped Sandpiper
	Common Scoter	13	Stilt Sandpiper
	Bonaparte's Gull	14	Least Bittern
	Solitary Vireo	15	Wood Thrush
	Savannah Sparrow	16	Blackburnian Warbler
	Yellow Rail	17	Northern Waterthrush
	Red-throated Loon	18	Mississippi Kite
	Snow Goose	19	Kentucky Warbler
	Common Loon	20	Northern Phalarope
	Robin	21	Black-billed Cuckoo
	Rusty Blackbird	22	Lesser Scaup
	Lesser Scaup	23	Ring-necked Duck
	Ring-necked Duck	24	Chestnut-sided Warbler
	Henslow's Sparrow	25	Swainson's Thrush
	Whistling Swan	26	Upland Sandpiper
	Long-eared Owl	27	Least Tern
	Surf Scoter	28	Cliff Swallow
	Leconte's Sparrow	29	Parula Warbler
	Horned Grebe	30	Yellow Warbler
	Short-eared Owl		Kirkland's Warbler
	Snowy Owl		Pectoral Sandpiper
	Hooded Merganser		Eastern Wood Pewee
	Dovekie		Sandwich Tern
	Canvasback		Tennessee Warbler
	Greater Scaup		Purple Gallinule
	Pine Siskin		Roseate Tern

to see them. Contact a professional who can confirm the sighting and alert the proper people. 6. Abide by the wildlife protection laws. These are extensive and very carefully spelled out in England.) In this country, for example, it is illegal to have a non-game bird in your possession unless you are licensed. Therefore, if you find an injured bird, contact Dr. Ann Beck at the Sea Island Veterinary Clinic. She is licensed and equipped to care for wildlife. Those of us who have tried to nurse injured or sick birds know what a demanding, difficult and disappointing task it can be. More on this code of conduct next month.

Speaking of Dr. Beck, Eileen Harmon and I took an injured hummingbird to her a few weeks ago. The bird's lower mandible was lying on its chest. It was marvelous to see Dr. Beck sew her jaw back together with eye sutures. The bird did very well for nearly three weeks, but as the sutures dissolved, it became apparent that the injury wasn't healing and the beak dropped back down. The hummer didn't make it, but much was learned from the effort. At Jean Pfaff's advice, protein in the form of liquified chicken was added to the sugar water, it revived the bird for a time.

The Macintoshes in Summerville have a leucistic chickadee at their feeders for the second year. He's all white except for the cap and throat. The Eppigs enjoyed watching a very young Mississippi kite being cared for by his parents. His face was quite quail-like. Carolina wrens are becoming a common sight at feeders. I observed one chasing other birds away while selecting smaller seeds to his taste.

The Burkards had some unexpected night birding at a football game in Atlanta. There were nighthawks catching insects all around the lights. In those very hot days of mid September a female summer tanager came to bathe-a treat for her and me! Water access for the birds is so very important. Lois Stone has had a lot of luck reviving birds that are stunned after hitting windows. She hand warms them quickly to combat shock. When their breathing becomes normal, she puts them in a quiet, safe place to rest as long as they need to often an hour or more.

Pat Murphy of *Birdwatcher's Digest* called recently to get our recipe for bird glop. She plans to use it in an upcoming column. In case you've forgotten, melt a cup or two of beef suet, add an equal amount of cheap peanut butter, and thicken with a box of grits.

Thanks for all the calls-keep them coming! Bruce Krucke, 101 Old Tavern, Summerville, SC, 29483. 871-2039.

editor's note: The phenomenon of night hawks catching insects can be observed along I-26 at any of the large lighted billboards. I was surprised to see dozens darting about against the night sky. The Burkard's sighting is interesting and I feel (somehow) that it confirms my observation.

backyard birder

by bruce krucke

Some literature from England offers a birdwatcher's code of conduct. I'll include several points a month till they're all covered. They apply mostly to "in the field" but are good for everyone to think about. 1. The welfare of the birds must come first. This applies whether you're photographing, banding, recording, making scientific studies, or just watching. 2. Habitat must be protected. Our activities must not cause damage to the trees, shrubs, grasses, dunes, etc., that the birds occupy or are passing through.

3. Keep disturbance to a minimum. Birds' tolerances vary between seasons and between species. Disturbing nesting birds not only interrupts the rearing of the young but also increases the chance of predation of eggs and young. In cold weather it causes waste of vital energy just when the birds need it most. 4 & 5. These both involve rare birds and migrants and reminds us to take care when divulging their whereabouts. Only knowledgeable people who won't disturb the birds or the habitat should come

