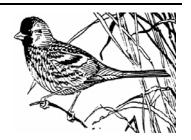
# Eastern Iowa Birdwatch



The Iowa City Bird Club Newsletter

Volume 27 Number 1 April 2007

## **Schedule**

**Field trips** depart from the Dodge Street Hy-Vee in Iowa City unless otherwise noted. Meet in the southwest corner of the parking lot. Please contact the leader in advance if you plan to meet the group at the trip destination. Many of our trips are accessible to people with disabilities; for more information please contact the trip leader. **Meetings** are held at the Grant Wood AEA Southern Facility, 200 Holiday Road in Coralville, generally at 7 p.m. on the third Thursday of the month.

March 27 – May 1, Tuesdays, 7:00 p.m. Beginning Birdwatcher Courses at the Conservation Education Center at Kent Park. Please pre-register with Brad Freidhof at 645-1011. See page 9 for a complete schedule.

April 7, Saturday, 8:00 a.m. Hawkeye Wildlife Area. BEGINNING BIRDER TRIP.

**April 14, Saturday, 7:00 a.m. Redbird Farms Wildlife Area** for Yellow-bellied Sapsucker, Winter Wren, kinglets, and other early migrants. Be prepared for wet, off-trail walking. Linda Donelson, 351-7452.

**April 15, Sunday, 8:00 a.m. Kent Park.** *BEGINNING BIRDER TRIP.* We will explore the trails in Kent Park looking for migrating songbirds and woodland residents.

**April 19, Thursday, 7:00 pm. Meeting.** John and Linda Donelson will present "Cana Mine: Panama's Wild Darien", their eight days in one of the wildest places on Earth.

**April 21, Saturday, 8:00 a.m. Macbride Nature-Recreation Area.** *BEGINNING BIRDER TRIP.* Visit the Raptor Center, observe birds up-close from the bird blind, and hike nearby woodland trails. Jim Scheib, 337-5206.

**April 21, Saturday, 6:30 p.m. Night Sounds** at Hawkeye Wildlife Area and Williams Prairie. We will listen for owls, frogs and toads, and other nocturnal creatures. Be prepared for wet walking. Karen Disbrow, 339-1017.

**April 26, Thursday, 7:00 p.m. Bird Watching for Kids Class** (ages 6-12) with Rick Hollis at the CEC in Kent Park. A Saturday morning field trip will also be offered. Please pre-register with Brad Freidhof at 645-1011.

**April 28, Saturday, 8 a.m. – Noon. Spring Cleanup Day at Hawkeye Wildlife Area.** We will pickup litter along roadsides and parking lots. Wear gloves and old clothes, and meet at the blue maintenance shed at the corner of Swan Lake Road and James Avenue. Rainout date Sunday, April 29. Chris Edwards, 887-6957.

April 29, Sunday, 8:00 a.m. Local Areas for shorebirds and other migrants. BEGINNING BIRDER TRIP.

May 6, Sunday, 8:00 a.m. Hickory Hill Park for warblers and other migrating songbirds. BEGINNING BIRDER TRIP.

Continued on next page →

## Schedule – continued

- May 7-11, 14-16, & 21-25, Weekdays, 6:30 a.m. Warbler Walks in Hickory Hill Park with leaders Ken Lowder and Jim Fuller. Meet at the north shelter parking lot at the end of Conklin Lane off Dodge Street. Daily sightings will be posted on our web site.
- **May 12, Saturday. Spring Migration Count.** To participate, call Chris Caster at 339-8343. See page 3 for more information.
- May 17, Thursday, 7:00 pm. Meeting. Tom Kent will present, "Birding southern South America and the Antarctic Peninsula", to include some geology, a photo tour and the birds with some focus on the effects of geographic isolation.
- May 19, Saturday, 6:30 a.m. Hanging Rock Woods for warblers and other passerines. Chris Edwards, 887-6957.
- May 26, Saturday, 7:30 a.m. Sycamore Bottoms for marsh birds. Mark Brown, 358-8765.
- **June 2, Saturday, 6:30 a.m.** Coralville Reservoir Bird Survey at Sand Creek 1. We will meet at Sandy Beach at 6:30 a.m. instead of at our usual meeting location. Chris Edwards, 887-6957.
- June 3, Sunday, 7:00 a.m. Saulsbury Bridge Recreation Area in Muscatine County. *IBA SURVEY*. Chris Caster, 339-8343.
- **June 9, Saturday, 7:00 a.m. Indiangrass Hills in Iowa County** for grassland species including Henslow's Sparrow, Sedge Wren, and Bobolink. *IBA SURVEY*. Mark Brown, 358-8765.
- **June 10, Sunday, 6:30 a.m. Coralville Reservoir Bird Survey** at Sugar Bottom 1. Chris Caster, 339-8343.
- June 16, Saturday, 6:30 a.m. Coralville Reservoir Bird Survey at Jolly Rogers 2. Chris Edwards, 887-6957.
- **June 23, Saturday, 6:30 a.m. Coralville Reservoir Bird Survey** at Sand Creek 2. We will meet at Sandy Beach at 6:30 a.m. instead of at our usual meeting location. Diana Pesek, 363-3522.
- June 23, Saturday, 7:30 p.m. Moth Night-lighting at Kent Park. A presentation by Jim Durbin at the Conservation Education Center will be followed by night-lighting to attract and identify moths.
- **June 24, Sunday, Hickory Hill Park Bio-Blitz.** See page 3 for more information. Call Karen Disbrow at 339-1017 for additional details.
- July 1, Sunday, 6:30 a.m. Coralville Reservoir Bird Survey at Upper Hoosier Creek 1. Bob Dick, 337-4945.
- **July 8, Sunday, 8:00 a.m. Lake Macbride.** View nesting Ospreys from Richard and Nancy Lynch's pontoon boat, followed by refreshments at their home. For directions call Richard and Nancy at 624-3014.
- **July 14, Saturday, Annual Butterfly Count** sponsored by the North American Butterfly Association. We will visit Kent Park, Hawkeye Wildlife Area, and Lake Macbride. Contact Chris Edwards at 887-6957 for details.
- July 15, Sunday, 8:30 a.m. Mushroom and Bird Foray at Amana Woods with the Prairie States Mushroom Club. Bring water and a snack lunch to eat along the trail. Karen Disbrow, 339-1017.

### Schedule – continued

**August 16, Thursday, 6:00 p.m. Annual Picnic** at Hickory Hill Park north shelter. Bring something to grill, a side dish to share, table service, and drinks. For more information call Karen Disbrow at 339-1017.

**August 19, Sunday, 7:00 a.m. Hawkeye Wildlife Area** or other local areas for early fall migrants including shorebirds. Bob Dick, 337-4945.

## Other Dates of Note

**April 29, Sunday, 1:30 p.m. Presentation on Wildcat Den State Park** by Jim Frank. Meeting Room A at the Iowa City Public Library.

May 5, Saturday, 9:00 – 11:30 a.m. Project Green Garden Fair at Carver-Hawkeye Arena.

May 18-20, Friday-Sunday. Iowa Ornithologists' Union Spring Meeting in Sioux City. For more information, see the IOU web site at <a href="https://www.iowabirds.org">www.iowabirds.org</a>.

## Hickory Hill Park Bio-Blitz Sunday, June 24

This will be a one day "All-Taxa Inventory" of the park co-sponsored by the Friends of Hickory Hill Park, Prairie States Mushroom Club, and Iowa City Bird Club. All events will start at the shelter located at the Conklin Lane entrance off Dodge Street. Everyone is welcome and no experience is necessary - the more eyes we have looking, the more species will be found. If you have knowledge of a particular plant or animal family and would like to lead an event, contact Karen Disbrow at 339-1017, Sarah Walz 466-0908, Damien Pieper or iowafungi@yahoo.com.

The schedule is still evolving, but tentative events include: 6 a.m. bird walk; 9 a.m. mushroom foray; 10 a.m. dragonflies; afternoon – prairie hike, tree walk, snails, turtles; 8 p.m. frog calls; 8:30 p.m. owl calls; 9 p.m. moths.

Bring binoculars, baskets for mushrooms, chairs and flashlights for evening events. Children must be accompanied by an adult. For updates, check the following web sites geocities.com/iowafungi, hickoryhillpark.org, icbirds.org; or contact one of the three persons listed above.

# Spring Migration Count Saturday, May 12

Our annual Spring Migration Count is Saturday, May 12th. This count is run just like our Christmas Bird Count, except that it is countywide. Observers have a 24-hour period on Saturday, May 12th to count every bird they can. Both numbers of species and numbers of individual birds are recorded. The results of our previous counts can be found at our website.

There won't be an organizational meeting for the count this year, but we will meet on count day for lunch at the Coralville Hy-Vee Deli at noon. If you wish to participate you will need to contact the count compiler, Chris Caster, in advance of count day at cjcaster@earthlink.net or 339-8343. Participants can download a spring count checklist from the club website. These will also be available at the April club meeting.

## 2006 Iowa City Christmas Bird Count Chris Edwards and Bob Dick

The 56th annual Iowa City Christmas Bird Count was held on Sunday, December 17. The total of 77 species was the second-highest total ever, and well above the count's ten-year average of 67 species. Temperatures on count day were above normal and ranged from 34° to 45° F. There was a variable northwest wind and partly cloudy skies. There was no snow cover. The Coralville Reservoir and Lake Macbride were partly frozen, while the Iowa River and smaller streams were open. These conditions yielded many lingering water birds. Remarkably, three species new to the count were seen: Ross's Goose, Cackling Goose, and American White Pelican. This brings the all-time list to 133 species. Several other infrequently-seen species were found, including Ring-necked Duck, Northern Bobwhite, Wilson's Snipe, Long-eared Owl, Short-eared Owl, Loggerhead Shrike, Golden-crowned Kinglet, Yellow-rumped Warbler, Snow Bunting, and Eurasian Tree Sparrow. Almost all expected species were found, with Northern Saw-whet Owl and Swamp Sparrow being the only notable misses.

#### Waterfowl to Pelicans

This year there were many lingering waterfowl, especially geese. A flock of 50 Greater White-fronted Geese passing overhead at Hawkeye Wildlife Area provided an all-time high count and only the second sighting ever. A single Ross's Goose was found at Sand Point for a first count record. Canada Geese were seen in record numbers, although some may have been counted more than once as they moved throughout the count area. Cackling Geese were seen by two parties and were also a first count record, albeit an expected one since the species was split from Canada Goose. Although Mallard numbers were below average, the ten duck species recorded was the most in five years; the three Ring-necked Ducks were the rarest of these. Ring-necked Pheasants and Wild Turkeys were both found in below-average numbers this year, perhaps due to the lack of snow cover. Northern Bobwhite was found for the second straight year after being absent on the count for ten years. Two American White Pelicans above the Coralville Dam furnished a first count record.

#### Raptors to Woodpeckers

Sharp-shinned and Cooper's Hawks were both seen in record numbers, and American Kestrel numbers were above average. Other raptors were seen in average numbers. Two lingering Killdeer were found, and a single Wilson's Snipe was the first in five years. Ring-billed Gulls were widely reported. The Mourning Dove population is apparently doing well, as the 804 birds is almost double the previous all-time high-count in 2003. Only two Eastern Screech-Owls were found despite a determined pre-dawn effort by Chris Caster and several others. Great Horned Owls were seen at their highest level in ten years, so perhaps this species is rebounding from West Nile Virus. Two Long-eared Owls and one Short-eared Owl were nice finds, but for the third straight year no Northern Saw-whet Owls were found. The 118 Red-bellied Woodpeckers reported is an all-time high, continuing an upward trend. Downy, Hairy, and Pileated Woodpeckers were all found in above-average numbers.

#### Shrikes to Warblers

A Loggerhead Shrike at Hawkeye Wildlife Area was a good find. They are seen slightly less often than Northern Shrike on our count, but have been found more frequently in recent years. Although their numbers were up slightly, American Crows were seen in below-average numbers for the fifth straight year. Black-capped Chickadee, Tufted Titmouse, and Brown Creeper numbers were down this year, while White-breasted Nuthatch numbers were up. A single Golden-crowned Kinglet was the first seen in four years. Fruit-eating birds including American Robin and Cedar Waxwing were seen in above-

average numbers, and the 51 Eastern Bluebirds was an all-time high count, tripling the previous record. Previously absent for ten years, three Yellow-rumped Warblers were recorded for the second straight year in the same area at Hawkeye Wildlife Area.

#### Sparrows to Old World Sparrows

Sparrow numbers were unremarkable. Fox Sparrows, formerly very rare on our count, have now been seen in six of the last eight years. A single Snow Bunting at Babcock Access was notable. Red-winged Blackbirds were seen in above-average numbers, and Common Grackles and Brown-headed Cowbirds set ten-year highs. Not surprising considering the weather, Purple Finches and Pine Siskins were seen in below-average numbers, as were American Goldfinches. House Sparrows were recorded at their lowest level in seven years, perhaps due more to observer bias than to lower population levels. Eurasian Tree Sparrow was recorded for the fourth straight year, this time in Jim and Karole Fuller's yard.

One species, Double-crested Cormorant, was seen during count week but not on count day and is not included in the totals.

This year there were 38 field observers in 12 parties. Field observers were Ed Allgood, Mark Bowman, Mark Brown, Chris Caster, Dean Colton, Bob Dick, Dara Dick, Karen Disbrow, John Donelson, Linda Donelson, Chris Edwards, Mary Edwards, Jonni Ellsworth, Mike Feiss, Linda Fisher, Jim Fuller, Bruce Gardner, Therese Guedon, Rick Hollis, Ken Hunt, James Huntington, Ken Lowder, Nancy Lynch, Richard Lynch, Ramona McGurk, John McLure, Rob Middlemis-Brown, Sherry Middlemis-Brown, Mary Noble, Jean Sandrock, Jim Sandrock, Jim Scheib, Bill Schreier, Cheryl Schreier, Tom Shires, David Weiss, Pete Wickham, and Carol Winter.

There were 25 feeder watchers at 18 locations this year, slightly down from last year's record effort. Feeder watchers were Ann and Jack Bagford, Jeanne and Larry Bonde, Al Carr, Carolyn Gardner, Marilou Gay, Gloria Henry, Anne and Chuck Hesse, Jan and Jenny Hollis, Nancy Johns, Barbara Kalm, Jane Knoedel, Cheryl Mercer, Alan Nagel, Anne and Edward Perkins, Sharon Scheib, Dick and Marcia Shaffer, Karla Stout, Ronnye Wieland, and Jude and Ronda Wilson.

This year's count was organized by Bob Dick. The results were compiled by Chris Edwards. A precount planning meeting was held at the home of Jim and Karole Fuller. On the day of the count we met for lunch at the North Liberty Community Center, at which time we had 68 species. At the end of the day, many participants gathered at The Brown Bottle Café in North Liberty for a well-deserved meal and compilation.

Nationally, this year marked the 107th consecutive Christmas Bird Count. More than 45,000 people from all 50 states, every Canadian province, the Caribbean, Central and South America, and many Pacific Islands participate in this annual bird census. Christmas Bird Count results are published annually in a special issue of American Birds. The results of all counts from 1900 to the present are also available on the Internet at <a href="www.birdsource.org">www.birdsource.org</a>, a cooperative project of the National Audubon Society and the Cornell Laboratory of Ornithology.

Thanks to everyone who participated for making this year's count a success.

2007 IOWA CITY CH	RISTMAS	BIRD COUNT SPECIES	LIST		
Greater White-fronted Goo	se 50	Killdeer	2	Carolina Wren	7
Ross's Goose	1	Wilson's Snipe	1	Golden-crowned Kinglet	1
Cackling Goose	102	Ring-billed Gull	1,047	Eastern Bluebird	51
Canada Goose	4,125	Herring Gull	2	American Robin	96
Wood Duck	4	Rock Pigeon	186	European Starling	1,147
Gadwall	10	Mourning Dove	804	Cedar Waxwing	329
American Black Duck	2	Eastern Screech-Owl	2	Yellow-rumped Warbler	3
Mallard	822	Great Horned Owl	7	American Tree Sparrow	378
Ring-necked Duck	3	Barred Owl	7	Fox Sparrow	2
Lesser Scaup	1	Long-eared Owl	2	Song Sparrow	15
Common Goldeneye	5	Short-eared Owl	1	White-throated Sparrow	39
Hooded Merganser	1	Owl sp.	2	White-crowned Sparrow	1
Common Merganser	40	Belted Kingfisher	2	Dark-eyed Junco	627
Ruddy Duck	1	Red-headed Woodpecker	16	Snow Bunting	1
Ring-necked Pheasant	34	Red-bellied Woodpecker	118	Northern Cardinal	444
Wild Turkey	35	Downy Woodpecker	147	Red-winged Blackbird	200
Northern Bobwhite	12	Hairy Woodpecker	29	Common Grackle	60
American White Pelican	2	Northern Flicker	40	Brown-headed Cowbird	20
Great Blue Heron	1	Pileated Woodpecker	3	Purple Finch	8
Bald Eagle	61	Loggerhead Shrike	1	House Finch	111
Northern Harrier	5	Blue Jay	173	Pine Siskin	12
Sharp-shinned Hawk	7	American Crow	532	American Goldfinch	140
Cooper's Hawk	4	Horned Lark	32	House Sparrow	569
Accipiter sp.	1	Black-capped Chickadee	268	Eurasian Tree Sparrow	1
Red-tailed Hawk	84	Tufted Titmouse	55		
Rough-legged Hawk	2	Red-breasted Nuthatch	2	TOTAL SPECIES	77
Buteo sp.	2	White-breasted Nuthatch	123	TOTAL INDIVIDUALS	13,310
American Kestrel	24	Brown Creeper	3		

## **New Publications**

**Iowa Sportsman's Atlas, 2006 Edition.** Sportsman's Atlas Company. Oversize, spiral-bound, with laminated covers. \$21.95.

A new version of this indispensable reference is available now at local bookstores. The most noticeable improvement is that the maps are now in color. They are also slightly larger, cleaner, and less "busy", making them much easier to read. (I still wouldn't recommend trying to read the small county road names while doing 50 on a gravel road though.) The boundaries of many public areas also appear to be more accurate now, including many sites previously marked on the map with a star.

I use this atlas frequently while out birding, and these improvements make the new edition well worth the price. Iowa Association of County Conservation Board's Guide to Outdoor Adventure. The latest edition of this guide is now available from the Johnson County Conservation Board. The 232-page guide features all of Iowa's 99 County Conservation Board holdings. The counties are alphabetically organized and each has a map the locations of these depicting Complementing each map is a table which breaks down the amenities of each area, making it easy for users to locate campgrounds, cabins, equestrian trails and much more. The guides are available at the Johnson County Conservation Board Office at F.W. Kent Park for \$10.00 each. They are also available by mail for \$12.00 each by calling the JCCB Office at (319) 645-2315.

I noticed a few County-owned public areas in this guide that are not featured in the new Sportsman's Atlas. In addition there is more information about amenities at each site in this guide.

# Membership Spotlight on: **Ken Lowder**

Name Ken Lowder

What is your occupation? I am an audiologist; but recently retired.

**Tell us about your family.** My wife, Mary, is also an audiologist. I guess interest in ears is definitely a family thing. I have one son, Jarryd, who is married and teaches at the School of Visual Arts in New York City.

**Where did you grow up?** I grew up in a small farming community in Moultrie County, Illinois. Lovington's population at the time was 1100. My high school graduating class totaled twenty-one kids.

When and how did your interest in birds develop? I didn't really become interested in birding until the early '70s. I had been a hunter and two of my hunting friends began to carry binoculars along when we were hunting. One of them once brought along a Peterson Field Guide. Our interest in identifying birds while afield was sparked. Gradually, the shotguns were left behind. One of those friends was a great outdoorsman but is no longer active at all. My other good friend, unfortunately, is now deceased.

**Did you have any birding mentors?** For the first few years, I think I was pretty much birding with my friend – and both of us were novices. But we found a lot of good birds together. Some time after that period, I began to hook up with Pete Wickham of Cedar Rapids. And Pete and I have been birding together now for several years. We've shared numerous outings here in Iowa. In addition, we've also shared a wonderful trip to SE Arizona and a great trip to Ecuador. And I must say that if anyone was a mentor, it was certainly Pete. He's a very knowledgeable guy, and a very warm and generous person to boot.

**Do you have a favorite bird or family of birds?** I would have to say the warblers because they're generally great songsters and most are lovely to look at. Last year, I managed to see my 700<sup>th</sup> ABA bird and it was quite appropriately a warbler: Rufous-capped Warbler in Sycamore Canyon, AZ.

What particular aspects of birding interest you the most? I have always loved to travel. And being a birder is the greatest excuse in the world for hitting the trail and going off somewhere new to see birds. Birding has taken me to some of the most beautiful and interesting places – and I'll admit, a few places that were quite forgettable. The Brownsville Dump comes to mind as an example of the latter.

**Do you keep a life list?** I certainly do. Current numbers are: ABA – 702; Iowa – 362; World – 2115.

What was the most recent bird you added to your life list? Well, this is a bit unusual I guess, but part of the joy of being retired is the opportunity to travel. And so another birding friend from Washington state and I just returned from a trip to Kenya. My last life bird was on that trip – Abdim's Stork.

What interesting birds have you seen in your yard? Our home is north of Iowa City in a wooded area. So we've had some very interesting birds over the years. Two species come to mind right away. We had a Hoary Redpoll at our feeders one winter. Also we have had Evening Grosbeaks, but not for some years now. For the last three years, Cooper's Hawks have nested in our woods and it's been great fun following each year's hatch of young hawks. A pair of Pileated Woodpeckers is also resident in our woods.

Where is your favorite place in Iowa to bird, and why? Let me fudge on that one and say "Iowa City" because there are three actual locations right in town that are all very accessible and consistently produce very good birds. The first is the wonderful old stand-by, Hickory Hill Park. But a "newer"

location is Sycamore Bottoms on the SE side of the city. This habitat is quite different from HHP, being essentially a marsh. But despite its relatively recent development, this area has also become a favorite. Lastly, there's Waterworks Park that has produced good birds also including a Yellow Rail that I managed to put up last year there.

**What is your "most wanted" Iowa bird?** Without question, a Whimbrel is my most wanted Iowa bird. I really would like to see this species in Iowa before I hang up the "nocs."

**Tell us about a favorite birding experience or place outside of Iowa.** Right after I retired, I booked a trip to Argentina. That trip took me to Tierra del Fuego - to "el fin del mundo" at a city called Ushuaia - the southernmost city in the world at about 55 degrees south latitude. And in a national park near there, I saw three Magellanic Woodpeckers in a large southern beech forest. I saw these guys on my birthday and recall never having received a better birthday present. These birds belong to the genus Campehilus – the same as our Ivory-billed Woodpecker. So they are very large, striking birds to see.

**Do you have any hobbies or interests besides birding?** I have been a motorcyclist for years. And I currently own two bikes – both BMWs. One is my old favorite, a 1983 R100RT that now has over 100,000 miles on it and still is in great shape. The other one was my retirement present to me. It's a 2006 R1200RT now with about 6000 miles and soon to be climbing.

I also play a lot of tennis now that I'm not working as much, about six – eight hours/week. I've dabbled a bit in genealogy trying to learn more about my family history. I play the guitar poorly. I read a lot. Recently, I've discovered geocaching.

**Do you have any favorite movies or TV shows?** I really don't watch much TV and when I do, it's mostly public television. I did see a couple of movies recently that I enjoyed a lot. <u>The World's Fastest Indian</u> starring Anthony Hopkins. It's a story about – what else – an old motorcycle. The other was a very entertaining movie called <u>That Thing You Do</u> starring Tom Hanks. For anyone who came of age in the sixties, this one is a real "don't miss."

**Have you read any good books lately?** I really do read quite a bit. Here are a few good ones that I've read in the last few months:

<u>Fiasco</u> – Thomas E. Ricks – A hard look at our involvement in Iraq.

<u>The Thousand Mile War</u> – Brian Garfield – WWII in the Aleutians. I read this book after returning from Adak.

<u>Team of Rivals</u> – Doris Kearns Goodwin – Probably my favorite book in awhile. It's a story about Abraham Lincoln and his cabinet. I grew up only a few miles from Springfield and ole Abe still lives in central Illinois!

<u>Under the Banner of Heaven</u> – Jon Krakauer – a story about a savage murder by fundamentalist Mormons.

<u>The Devil in White City</u> – Erik Larson – a story about a serial killer in Chicago at the 1893 World's Fair.

<u>Collapse</u> – Jared Diamond – How Societies Choose to Fail or Succeed.

1776 – David McCullough – Perhaps the most pivotal year in American history.

What is your favorite restaurant? Locally, I'd have to say Givanni's downtown. My wife and I find the food and atmosphere there very nice.



## 2007 Bird Watching Classes Tuesdays March 27 – May 1 at Kent Park



The Iowa City Bird Club and the Johnson County Conservation Department are offering a 6-week **Introduction to Birding Course at the Conservation Education Center in Kent Park.** There will be six Tuesday evening sessions along with six weekend field trips to area birding hot

spots.

Tuesday evening sessions are \$5 each for adults, and free for children accompanied by an adult. Iowa City Bird Club members receive free admission (a one-year membership is \$15, or \$10 for students). Participants may attend all six sessions or pick one or more to attend. Classes can hold 30, and advanced registration is requested – please call Brad Freidhof at (319) 645-1011 by noon of the Tuesday session. Handouts and refreshments will be provided. Come to class early and bird the loop path near the Conservation Education Center.

Weekend field trips are free. Children must be accompanied by an adult. Bring binoculars to all field trips; if you don't have a pair let us know in advance and loaners can be arranged. Spotting scopes are helpful for viewing shorebirds and waterfowl; if you have one bring it. Bird club members will have several scopes available on those field trips requiring one. All field trips will depart from the Dodge Street Hy-Vee in Iowa City; meet in the SW corner of the parking lot. For more information on field trips, call Karen Disbrow at 339-1017.

- **Sunday, April 1, 8 a.m. Field Trip to CONE MARSH.** Located about 25 miles SE of Iowa City, Cone Marsh is an excellent place to view migrating ducks, geese, and other water birds. Wear boots for walking in wet areas, and bring a spotting scope if you have one.
- Tuesday, April 3, 7 p.m. BASICS OF BIRDING II by Rick Hollis. Continuing the topics from the first session.
- **Saturday, April 7, 8 a.m. Field Trip to HAWKEYE WILDLIFE AREA** near North Liberty. We expect to see ducks, geese, American White Pelicans, and other early spring migrants. Wear boots for walking in wet areas, and bring a spotting scope if you have one.
- **Tuesday, April 10, 7 p.m. WHERE TO BIRD IN JOHNSON COUNTY** by Rick Hollis. Well known, lesser known and secret places to watch birds and study nature in and around Johnson County.
- **Sunday, April 15, 8 a.m. Field Trip to KENT PARK** near Tiffin. We will explore the trails in Kent Park looking for migrating songbirds and resident woodland birds.
- **Tuesday, April 17, 7 p.m. BACKYARD AND FEEDER BIRDS** by James Scheib. This session will cover the common birds found in our area's backyards during the year, and what to do to attract them.
- **Saturday, April 21, 8 a.m. Field Trip to MACBRIDE NATURE-RECREATION AREA.** Visit the Raptor Center, observe birds up close from the bird blind, and hike the nearby trails.
- **Tuesday, April 24, 7 p.m. LESSER-KNOWN BIRDS** by James Scheib. This class will go beyond the common backyard birds, and you will learn how to document rare bird sightings.
- Sunday, April 29, 8 a.m. Field Trip to LOCAL AREAS for shorebirds and other lesser-known birds.
- **Tuesday, May 1, 7 p.m. WARBLER IDENTIFICATION** by Karen Disbrow. Warblers are coming! Warblers are among our most colorful birds. Compare and contrast similar warblers.
- Sunday, May 6, 8 a.m. Field Trip to HICKORY HILL PARK. This park is a great place to view warblers and other migrating songbirds.

## A "Mad-Lib" for Birders in the Form of a Generic Rare Bird Account as Found in *Iowa Bird Life* Mike Dooley

While driving from one birding spot to another with your pals, solicit words from them as described in the brackets, without actually reading the narrative out loud yet. Don't nudge them toward bird words (unless specifically asked for in the brackets), instead accept whatever word in the English language they come up with that fits the description. Write those words into the narrative at their designated places, and then read the resulting "article" out loud to the group.

On [month, date, and current year] I was birding at [Iowa natural area] with my old friend, [famous actor]. We were not seeing much, mostly [any bird species in plural form] and one large flock of [another bird species in plural form]. As we neared a small [topographical feature] alongside a grove of [tree species in plural form], we saw a(n) [adjective describing size] bird fly from the top of a [same tree species as above, singular] and land on a small forb just this side of the [same topographical feature as above].

We got the bird in our binoculars and could see from its basic shape that it was a(n) [basic bird family, singular, such as heron or finch]. It had an unusually [adjective of size], [adjective of shape] bill, which appeared to be [color] in color. We both noticed a prominent [color] patch on its wings and a light [color] tip to its rather [adjective of shape] tail. I of course immediately thought of a [last name of famous actress, possessive form] [name of a continent or other large region, adjective or noun form, whichever works] [same basic bird family as above].

However, on closer, careful approach, we also now saw the [adjective of shape], dark [color] mark above its eye, thus eliminating a [repeat last name of actress above, possessive form] [repeat name of a continent or other large region above, adjective form] [repeat same basic bird family as above]. [Same actor above, first name only] promptly identified it as a [female first name, possessive form] [flower species]-[repeat same basic bird family as above].

Naturally we were very excited to find such a rarity in Iowa. The only other report I knew of in the ABA area was from [U.S. state], a bird that had nested on a window ledge on the top story of the [brand of breakfast cereal] headquarters building in [capital of same U.S. state]. That bird, unfortunately, had been drowned accidentally when a [type of employee at a large company] dumped her glass (or cup) of [beverage] out the window onto where the bird was nesting.

Afterwards as we sat in my car eating our [fish species], [vegetable], and [type of cheese] cheese sandwiches, which I had brought along for lunch, I browsed through the old [last name of baseball player, possessive form] Guide to [adjective connoting strangeness] Birds of Eastern [country outside of North America], where [repeat female first name, possessive form, as above] [repeat flower species as above]-[repeat same basic bird family as above] is endemic. There I read that this species was actually first described by [famous head of a nation from history, not American], who had discovered it while boating on the [famous world river] during a diplomatic mission, and named it after his pet [any animal], [repeat female first name from above], an example of why this guide is now largely discredited.

# Field Trip and Meeting Reports

January 8, Feeder Watch Social at Jim and Karole Fullers'. A congenial group of 25 birders brought in the new birding year by gathering for coffee, a tasty breakfast brought by participants, conversation, and some window bird watching. The highlights out the window were a Eurasian Tree Sparrow at the feeder, and Bald Eagles and Belted Kingfisher in the scope.

Participants: Barbara Beaumont, Mark Bowman, Karen Disbrow, Linda Donelson, Jim and Karole Fuller, Therese Guedon, Kurt Hamann, Bernie Knight, Kathleen Kuenstling, Ken and Mary Lowder, Gail McClure, Mary Noble, Rosemarie Petzold, Marcia and Richard Shaffer, Judy Sutherland, Gerry and Richard Tetrault, Pete Wickham.

Birds (26 Species): Canada Goose, Mallard, Eagle, Red-tailed Bald Hawk. Belted Kingfisher, Ring-billed Gull, Mourning Dove, Red-headed Woodpecker, Downy Woodpecker, Hairy Woodpecker, Red-bellied Woodpecker, Northern Flicker, Blue Jay, American Crow, Tufted Titmouse, Black-capped Chickadee, White-breasted Nuthatch, American Robin, Cedar Waxwing, White-throated Sparrow, Dark-eyed Junco, Northern Cardinal, American Goldfinch, House Sparrow, Eurasian Tree Sparrow.

– Jim Fuller

January 21, Owl Prowl. We had 5 inches of fresh snow overnight in the Iowa City-Cedar Rapids area prior to this event. Lots of snow with a temperature of 30 F kept the outing primarily within the city limits, though we did travel to Morse for the Screech-Owl. There was an abundance of sledders in Hickory Hill Park at both the Dodge St. entrance and the Bloomington St. entrance. We tried to call a Barred Owl in at both locations without success. We visited the A St. location early in the afternoon but did not call there. I was

reasonably certain we would see those owls near dusk.

We went to the Teg St. park where we observed a well-known tree often used in the past by a Great Horned Owl. This showed the group what an owl nesting tree consists of in size (large diameter of 3 ft.) and large cavity with roosting branches nearby if not on the same tree. Following this we went to the Sycamore bottoms where flying Short-eared owls had been seen about 1/2 hour before dusk several days prior. We were too early, and did not see any owls. We drove to Morse and the gray-phase Eastern Screech-Owl appeared in the nesting box. As a bonus another Screech-Owl in a woods to the west called repeatedly too. Back to A St. where a pair of Barred Owls exited the nest cavity and flew to a nearby Sycamore, mated, hooted and separated to begin the night hunt.

I wish to thank to Linda Donelson and Ken Lowder for bringing and playing tapes of the owl calls.

Participants: Nausheruan Ahmed, Mark Bowman, Drew Dillman, Karen Disbrow (leader), Linda Donelson, Laurie Fajardo, Lorraine Kent, Ken Lowder, Gerald Pearson, Sue Sarlette.

Owls: Barred Owl 2; Eastern Screech-Owl 2

- Karen Disbrow

February 3, Amana Turkey Walk. I was certainly amazed at the turnout for this outing. This was the first day of truly bitter cold to descend on us in February. Appropriately, we were all decked out like Eskimos, because we did spend close to an hour hiking around the ice pond area near Homestead in sub-zero temps. It took that long to find a lone Saw-whet Owl amongst all the cedars there. Thanks to Lanny Haldy for informing me that one had been seen just two weeks before otherwise we might have given up. Everyone was quite cold and a few had already headed for the cars parked along Hwy. 6 when the owl was discovered.

Thankfully most folks returned for a look, because it was the highlight of the morning.

After returning to our cars, we caravanned through South and High Amanas. One brief stop was made when I attempted to get everyone stuck in a corn field because I had seen a Horned Lark—I had to pull in because there wasn't a shoulder on Hwy 220. Everyone got out nicely though and we were right on time for our 9:30 reservation at the Colony Restaurant for breakfast. Jim and Sharon Scheib and Bernie Knight joined us there.

A few of us decided to drive the Amana Rd. on the return home. More flocks of robins were seen and a dark phase red-tail was hunting near the intersection with Blaine Cemetery Rd. It had the red tail of an adult, yet a dark belly and underwing coverts. Rufous and dark morph red-tails are seen amongst the Western red-tail subspecies. Interestingly the last time I remember seeing one of these in Iowa was on another Amana outing maybe ten years ago.

A very brief stop at the DNR sheds allowed Diana to show off the wonders of her new IPOD or "BirdPod", but the Townsend's Solitaire declined to respond to the tape. And as is often the case—the only turkeys seen were the two-legged puffballs with binoculars.

Participants: Mark Bowman, Chris Caster (leader), Drew Dillman, Karen Disbrow, Jonni Ellsworth, Jim Forde, Bruce Gardner, Therese Guedon, Ken Hunt, Ken Lowder, Diana Pesek, Linda Rudolph

Birds (15 species): Red-tailed Hawk, Rock Pigeon, Mourning Dove, Northern Saw-whet Owl, Northern Flicker, Blue Jay, American Crow, Horned Lark, Eastern Bluebird, American Robin, European Starling, Northern Cardinal, American Tree Sparrow, Dark-eyed Junco, House Sparrow.

- Chris Caster

**February 15, Meeting**. Jim Walters of the Johnson County Songbird Project gave a

presentation on Purple Martins. Jim says that he is not an expert, but a hobbyist. His love for Purple Martins began while growing up in western Johnson County where is family had them on the farm. Four summers ago Jim put up a martin house near the groundskeeper shed at Finkbine Golf Course where he works. They didn't attract any martins the first year, but got two pair in the second year. There are now two colonies established on the Finkbine grounds and folks are welcome to drive on back along the service road entrance on Mormon Trek Ave. to see them. One of Jim's motivations in promoting martins is too promote human happiness, something martins seem able to supply. It used to be that his co-workers would refer to the martin house and the martins as "Jim's", but now they are referred to as "ours". Our love for martins and Jim's passion for them seem contagious.

We've learned a great deal about martins in the last twenty years. In 1987 James Hill began the Purple Martin Conservation Organization. There are two races of Purple Martin: eastern and western. The western race will nest in a variety of natural cavities, but the eastern appears dependent on human-provided nesting boxes. According to Hill, this adaptation seems to have begun with the American Indians' placement of gourd houses. Ornithologist Alexander Wilson noted martin houses in Indian villages during the 1830's. The eastern race seems to not only prefer, but require, human companionship.

When Jim is setting up a new house he looks for areas with a certain level of human activity. Jim feels that being close to humans is needed for predator protection. Great Horned Owls, raccoons, snakes, accipiters and falcons all prey on martins. Deeper nest boxes protect the removal of young birds by raccoons and owls. Placing colonies 12 to 16 ft. in the air and 30-40 feet from surrounding trees and buildings prevents any sneak attacks. The colonies also need to be monitored for starling and House Sparrow nesting. Jim says that newer boxes designed with oval entrances rather than the

historic 2½-inch round holes, deter starlings quite well. House Sparrow nests need to be physically removed on a weekly basis.

Purple Martins are neotropical migrants and they winter in Brazil. They are not a bird of conservation concern and large roosts on migratory routes and wintering grounds can actually be a nuisance; so the birds aren't viewed as fondly everywhere they go. The returning first year males are the birds most likely to visit a new colony. These birds don't always return to their natal colony or if they do are driven off by older birds. Jim plays tapes of pre-dawn songs of older male birds to attract birds to a new colony. There are also tapes available for day-time chatter. These are extremely helpful as attracting martins to new colonies can take years. The males attain their fully purple coloration in the second year. These birds can return to Iowa as early as late March, but Jim says a new colony can be erected later in the spring as the first year males return later and some nests don't become established until June. Established colonies need to be available for returning birds in March and the boxes can usually be stored for the winter sometime in September. Jim builds his houses, but they are readily available in different styles, complete with post and winch system, from a number of online sources and magazines.

The establishment of martin colonies was by J.L.Wade, promoted greatly manufactured the boxes for sale. He advertised that martins are capable of eating up to 2,000 mosquitoes daily, but this was something Wade just made up. As Jim explains, martins fly by day, while mosquitoes fly by night. If you wish to eliminate mosquitoes, attracting bats would be far more effective. Martins will eat most any flying insect, including dragonflies. degrees seems to be the magic temperature for martins. Below this sufficient insects don't fly and the martins can starve if they don't get food for a couple of days. Jim says he has fed his martins on occasion by tossing handfuls of crickets and mealworms onto a shed roof. He also knows of a man who would sling-shot crickets into the air where the martins would take them on the wing.

Mite infestations are also a problem for martins. Many hobbyist combat this by changing the nest material about two weeks after the birds hatch. The nests are usually made of dried grass and mud. Martins will also place fresh green leaves under the eggs, presumably because they have some insecticidal properties. Some hobbiests use the insecticide Savin to combat the problem. Martins typically fledge in 28 days. Martins typically live 4 to 5 years, but can live up to 14 years.

Jim says that those interested in learning more are welcome to contact him anytime. He would be willing to assist anyone wishing to start a new colony. There will also be a Martin Seminar on Saturday, March 24th at the Cam Clothing Center near Kalona. It is an all-day event with martin things in the afternoon.

Oddly Jim expressed a deep affection for House Sparrows. Oddly because his family used to trap them when he was growing up and he combats them endlessly on behalf of his martins, bluebirds, and kestrels. Some time ago Jim decided that he would not permit any House Sparrows to nest on his farm, so he removed every nest and plugged every hole. Amazingly he found that a pair then built the most extraordinary natural round nest with an entrance hole in the bottom. It was truly a marvelous structure, perfectly suited to keeping young birds safe, warm and dry. We didn't know they still had it in them.

Thanks Jim for a very interesting presentation. Keep up the good work. For more visit the Purple Martin Conservation Association at http://purplemartin.org/.

Attendees: Jean and Larry Bonde, Barry Buschelman, Chris Caster, Karen Disbrow, Linda Donelson, Chris Edwards, Linda Fisher, Bruce Gardner, Therese Guedon, Ken Hunt, Bernie Knight, Dave Kyllingstad, Kristen Lawton, Darlyne and John Neff, Mark Oxley, Suzanne Sarlette, Jim Scheib, Blossom Shaw.

- Chris Caster

February 18, Quad Cities. Hoping to find the pair of Harlequin Ducks which had been present for the last week, we stopped first at Lock and Dam 14 on the Mississippi upriver from Bettendorf. Fortunately both ducks were still there, loafing near the shore with a group of Canada Geese and Mallards. We got some nice looks before they paddled themselves out of view around the point. Maybe they were tiring of the crowds. Also seen there were three Lesser Scaup and an American Black Duck. Feeding along a small island this side of the channel were four Mute Swans. And feeding in a tree behind the parking lot was an adult Bald Eagle with a fish. That seemed to entertain the group greatly.

Our second stop was at Lock and Dam 15 in Davenport. There were more waterfowl—mostly Mallards, but a lone Redhead and Common Goldeneye were also seen, along with a group of Lesser Scaup and a Ring-necked Duck. Unbelievably we had not yet seen a gull all morning. A lone American Coot seemed to be struggling with something—an injured foot or tangled in fishing line—it wasn't getting far. A local television crew was there and seemed to have a lot of questions regarding the coot. We left before they began filming.

After several attempts to shake the Karen Disbrow vehicle by running yellow lights, we headed across the I-74 bridge to visit the Butterworth Parkway. There we finally found some gulls. A sizable roost of Herring Gulls and two adult Lesser Black-backed Gulls were on the near shore ice. Lots of Common Goldeneyes were also swimming in waters closer to the Iowa side.

Our last stop was along Canal Shore Drive, which runs along the river under the I-80 bridge. There we found a number of Canvasbacks and many more Common Goldeneye and Ringnecked Ducks. We also made a quick run up to

the town of LeClaire, but Linda Rudolph thought it a sad little town. So we turned around in a sad little gas station for one last scope along Canal Shore Drive. We didn't see any new birds, but we ran into Linda and John Donelson just arriving from Iowa City and visited briefly before heading for home.

Thanks to Linda and Karen for driving.

Participants: Mark Bowman, Chris Caster (leader), Karen Disbrow, Linda Fisher, Ken Hunt, Mary Noble, Linda Rudolph.

Birds (23 species): Canada Goose, Mute Swan, American Black Duck, Mallard, Canvasback, Redhead, Ring-necked Duck, Lesser Scaup, Common Goldeneye, Harlequin Duck, Bald Eagle, Red-tailed Hawk, American Kestrel, American Coot, Herring Gull, Lesser Blackbacked Gull, Rock Pigeon, Mourning Dove, Red-bellied Woodpecker, American Crow, American Robin, European Starling, House Sparrow.

— Chris Caster

March 10, Burlington Area. We met in Iowa City at 6:30 a.m. to carpool to Burlington. The temperature was 31 F and cars that sat out overnight needed windows scraped. We rendezvoused with Chuck Fuller and John Rutenbeck at the Port of Burlington and birded until 5 p.m.

It was a gorgeous day with temperatures reaching the mid-50s and lots of sunshine. We saw thousands of birds. First stop was Dankwardt Park where we walked the storm sewer in the Cascade Ravine. Winter and Carolina Wrens were heard and seen. The highlight was an Eastern Towhee that flew across our path as we juggled positions to keep it in sight. Sacred Heart Cemetery was very quiet and we did not stay there long. The Dial Co. pond had many ducks and the resident Trumpeter Swans from the DNR re-introduction project. Cessford Quarry had many Ring-billed Gulls and a few ducks.

The Wever Elevator at Calusa did not have many birds since the river was relatively open, though there were great pieces of ice being utilized by the eagles and gulls at many of our stops. We did meet up with two local birders, Sarah Bissell and Trish Ditsworth of West Burlington. We went to Fort Madison, Sullivan Slough (no Mockingbird), and Denmark where a single Eurasian Collared-Dove was found. At Heron Bend we saw a flock of 50 American White Pelicans, the first of this species seen for the day, and we were pretty confident they had just flown up the Mississippi Flyway.

All in all it was a great day. If you have never been to the Mississippi River during spring migration you have missed a never to be missed sight. I urge you all to make a trip there – you will not regret it!

Participants: Karen Disbrow, Linda Donelson, Linda Fisher, Chuck Fuller (co-leader), Damian Pieper, Linda Rudolph, John Rutenbeck (coleader).

Birds (67 species): Snow Goose, Canada Goose, Mute Swan, Trumpeter Swan, Gadwall, American Wigeon, Mallard, Blue-winged Teal, Northern Green-winged Teal. Shoveler. Northern Pintail, Canvasback, Redhead, Lesser Bufflehead, Goldeneye, Scaup, Common Merganser, Hooded Common Merganser, Ruddy Duck, Wild Turkey, Pied-billed Grebe, Horned Grebe, American White Pelican, Great Blue Heron, Turkey Vulture, Bald Eagle, Northern Harrier, Red-tailed Hawk, American Kestrel, American Coot, Killdeer, Ring-billed Gull, Herring Gull, Rock Pigeon, Eurasian Collared-Dove, Mourning Dove, Belted Kingfisher, Red-bellied Woodpecker, Downy Woodpecker, Northern Flicker, Blue Jay, American Crow, Horned Lark, Tree Swallow, Black-capped Chickadee, Tufted Titmouse, White-breasted Nuthatch, Carolina Wren. Winter Wren, Eastern Bluebird, American Robin, European Starling, Cedar Waxwing, Eastern Towhee, American Tree Sparrow, Song Sparrow, White-throated Sparrow, Whitecrowned Sparrow, Dark-eyed Junco, Northern Cardinal, Red-winged Blackbird, Eastern Meadowlark, Common Grackle, Brown-headed Cowbird, American Goldfinch, House Sparrow, Eurasian Tree Sparrow.

- Karen Disbrow

March 22, Meeting. I think it is so wonderful that some of our most colorful birds regularly visit our backyards: the cardinal, the Blue Jay, the goldfinch, the Red-bellied Woodpecker, the robin, and even the grackle and the starling. I suppose it was in large part the colors of birds that first attracted me as a child. Inspired by Audubon and others I tried my best at drawing all sorts of birds, faithfully replicating the patterns and shifting hues with pencil and paint. I was most fascinated by the shifting hues and as a very young birder I struggled mightily to distinguish "purple" from "bronzed" grackles, as my field guide required. Last May, I got a call from Ed Folk. A bird had been killed against one of his large windows and he hoped that I would be able to identify it. It was a Tennessee Warbler and Ed commented on the green back appearing iridescent. Having some background in the area, I wasn't sure that the green was truly iridescent, but I did think that there was something ephemeral about it and decided then that this would be a great topic for a presentation.

Birds get their colors from two sources: pigments and structural colors, which accounts for the incredible array of colors they possess. Pigments derive their color as a result of their molecular structure. As incident sunlight interacts with the pigment, certain photon energies are absorbed, while others are reflected The energies absorbed are or transmitted. highly specific to the electrons within the atoms that make up the pigment molecule, as electrons are only allowed to exist in very precise energy states. Any photon that would boost an electron to an unallowable energy state is simply not absorbed. Red pigments are red because they are capable of absorbing a range of photon energies that include violet, blues, and greens, while reflecting the reds and yellow photon energies.

Structural colors are produced by the way light interacts with the spatial distribution of molecular structures. Light has wavelike properties, and different frequencies behave a little differently as they bend around structures or pass through materials of different optical densities. The incident light then becomes dispersed into its constituent wavelengths as through a prism. Extremely small structures within bird feathers can disperse and filter light, such that those wavelengths that are in-phase will be reinforced, while those wavelengths that are out of phase will be subdued or even eliminated entirely.

The two classes of pigments most of us are familiar with are the carotenoids and the melanins. The carotenoids are a class of very similar 40 carbon molecules that have a backbone of conjugated carbon double bonds and with a six-carbon ring structure at each end. They produce the bright reds of cardinals and tanagers and the bright yellows of goldfinches and canaries. These pigments must be acquired from food sources and must be available for use during molt. Studies with Northern Cardinals and House Finches have shown that carotenoids are a limited resource and so they are thought to be an honest indicator of quality in mate selection, because brighter coloration results from the superior foraging abilities and/or superior overall health of an individual. Zookeepers learned long ago that their flamingos would fade from red to white if they did not supplement their diets with carotenoid rich crustaceans during molt. The pink coloration often present on the underside of some gulls is thought to be from carotenoids present in uropygial gland secretions and rubbed into the feathers, although some evidence points to developmental deposition.

Cells within the feather follicle called melanocytes synthesize melanin pigments. This requires the amino acid precursors tyrosine and cysteine. The inability to produce melanins results in albinism. Small genetic differences in cell membrane receptors within melanocytes

produce the light and dark color morphs found in the Lesser Snow Goose and jaeger species. Melanins are of two types. Eumelanin produces the very dark black and brown colorations and phaeomelanin produces a range of warm colors from dark brown to chestnut brown to buff colorations, even yellows. colorations of the Barn Swallow and American Robin have been shown to be from melanins. Melanocytes produce and package the melanin pigments into granules of various shapes, which through a process of phagocytosis are taken up by keratinocytes in the epidermis. Melanins are assumed to confer some wear resistance and the presence of heavy melanin deposition in the flight feathers of many species seems to bear this out, although studies of feather strength in Osprey seem to contradict this hypothesis. It has been observed that melanins are more prevalent in birds of very humid climates and some have hypothesized that melanins confer feather degradation resistance to microorganisms. It has also been hypothesized that melanin confers thermoregulatory benefits although this seems counterintuitive as many desert species, i.e., the Phainopepla, are dark. The answer to this apparent contradiction may lie in the fact that black objects not only absorb more light energy, but they also radiate more heat energy.

Many of the intricate patterns in feathers and feather groups are produced by melanins. This is made possible by many controlling steps in the production and deposition of melanins within the feather. Hormonal or diurnal physiologic rhythms are thought to be involved. In contrast, the dietary carotenoids are simply taken up and deposited en-masse with other circulating lipids to produce large unbroken regions of coloration. Even the dermal fat of cardinals will be colored pink and that of goldfinches yellow.

Another group of pigments are the porphyrins. These produce a wide range of hues. Hemoglobin in blood and chlorophyll in green leaves are both porphyrins. Porphyrins are responsible for the brown pigments in owls,

goatsuckers, and bustards. The only green pigments found in birds are of a porphyrin found only in turacos.

Parrots have developed their own unique red and yellow pigments, called the psittacofulvins. It is interesting to evolutionary biologists that there does not appear to be any difference in the coloration between individuals, so bright coloration is not an honest advertisement of individual quality as it is in carotenoid pigmentation. The green pigments are produced by a combination of a yellow pigment and a structural color—yellow and combining to produce green. The way this works has been well documented by breeders of Wild parakeets are green, but Budgerigars. birds without the blue structural coloration look yellow. Parakeets without the ability to produce yellow pigmentation appear blue. parakeets that can't synthesize melanin appear light blue. And parakeets that can't produce any of the above appear white.

Most blue color is structural. The sky is blue because the shorter blue wavelengths scatter as they pass through more easily atmosphere. It had long been assumed that the blue produced by bird feathers resulted from structural factors within feathers incoherently scattering blue wavelengths, much as air and Recently it has been water molecules do. demonstrated that the blue color is the result of a coherent scattering mechanism that depends on the spatial relationships of structures with different refractive indexes within feather barbs. Air bubbles within a keratin matrix typically quasi-ordered produce these structures. Underlying layers of melanosomes, act as an optical insulator to absorb other wavelengths and intensify the blue coloration.

Some of the most brilliant colorations in birds are structural colors produced by interference. The subtly changing, but constant colors of the peacock and the brilliant colors of hummingbird gorgets that wink on and off, are produced by interference. All of us have experienced the optical phenomenon of iridescence in the

changing hues of a soap bubble or an oil slick. Thin-film iridescence is produced when light reflected off the front surface of a film is out of phase with light reflecting off the back surface. This occurs because there is a difference in the path length that the light must travel to go through the film and reflect back out with respect to that reflected off the front surface of the film. This path length difference has a mathematical relationship to each wavelength and for only a small number of wavelengths will the light reflecting off the front and back surfaces of the film be in phase (the peaks and valleys of the waves aligned precisely), and constructively interfere. Most wavelengths will be partially out of phase and so will destructively interfere. When the light angle, observer angle or film thickness varies, so will the in phase coloration.

Some birds produce their coloration by a mechanism similar to thin-films. Starling and ibis species produce an oily sheen by having a thick layer of keratin over a underlying melanin layer. Most actually have a peak reflectance in the infrared portion of the spectrum and then a number of harmonic reflectance peaks within the visible light portion that accounts for their interesting hues. The Plum-colored Starling has a peak in the red and in the blue portions of the spectrum and so looks purple.

Another means of producing interference is with a diffraction grating. As a wave front passes through a slit it spreads out and produces an interference pattern with the wave front spreading out through a nearby slit. An array of a large number of equally spaced slits is a diffraction grating. The iridescence produced by the spiraling line of dimples pressed into a compact disc is one example. Birds like the peacock, quetzal, sunbird, and hummingbird take this mechanism even further. Electron micrographs of iridescent feather barbules reveal an extremely precise spacing of melanosomes in layers within a keratin matrix. These melanin granules can be rod shaped or flat and round like platelets. Some contain air some solid spaces and are These

nanostructures within these arrays are so small as to be on a scale of the wavelength of visible light 340 to 720 nm. This is unbelievably small. There are a million nanometers in one millimeter. It is an absolute wonder of nature that different bird families have evolved similar, but different mechanisms of such precision. Each nanostructure array acts as a filter through which incident light must pass through. Only select wavelengths of light, often at narrow angles of incidence, will satisfy the optical requirements of the array as to be reinforced and reflected to an observer. The color produced is purer and therefore more brilliant than anything else found in nature. Rivaled only by perhaps certain families of fish or insects, they truly have to be seen, to be believed.

Thanks to Sharon Scheib for bringing the refreshments.

Attendees: Jean and Larry Bonde, John Broz, Barry Buschelman, Karen Disbrow, Chris Caster, Chris Edwards, Linda Fisher, Bruce Gardner, Rick Hollis, Kenneth Hunt, Lorraine and Paul Kent, Bernie Knight, Dave Kyllingstad, Kristen Lawton and Mark Oxley, Dick and Nancy Lynch, Diana Pesek, Rosemarie Petzold, Jim and Sharon Scheib, Dick and Marcia Shaffer, Lisa Spellman

- Chris Caster

March 25, Cone Marsh. It felt more like May than March for our annual spring trek to Cone Marsh, but nobody was complaining. When we arrived at the marsh the temperature was in the low-60s, but cloudy skies and a brisk wind made it feel a little chilly. But gradually the skies cleared and the temperature warmed to the mid-70s.

As usual, we started our tour of the marsh in the NE corner near the caboose. To the south we could see a mixed flock of Snow Geese and Greater White-fronted Geese, and while we were here several other flocks of Snow Geese joined this group or flew over. There were many other waterfowl to look at, and we took our time sorting through the ducks and making

sure everybody had satisfying scope looks at all the species.

Our next stop was the causeway on the south side of the marsh. The water south of the road was very high, and there were not many ducks present. A flock of coots on the north side contained some Ruddy Ducks and a few other waterfowl, and we spotted several Blue-winged Teal in the reeds. We moved on, stopping briefly near the spring in the SW corner of the marsh, where we heard two Fox Sparrows singing their lovely songs.

We walked a short distance onto the main dike, where we saw several American White Pelicans, along with many coots and ducks. Two Eurasian Tree Sparrows and a Rusty Blackbird were spotted in the trees on the west end of the dike. By then it was time to break out the freshbaked cookies supplied by my wife Anne. (Thanks honey!)

Our last stop at the marsh was at the boat ramp in the NW corner. Here there were many ducks to sort through. We saw many Canvasbacks and recorded our first Northern Pintail. Recent work by the DNR to clear out the underbrush from the woodland in this area was evident. The apparent goal is to return this area to a more open savanna habitat with large oaks and an open understory.

Ken Lowder and Bill Scheible drove ahead to do some advance scouting for the group, and following up on their sightings we were able to view Wilson's Snipe, Green-winged Teal, and Loggerhead Shrike along nearby roadsides. We also found newly-arrived Field, Savannah, and Vesper sparrows along the roads before heading back to Iowa City.

Participants: Ed and Jean Allgood, Sarah Bissell, Mark Bowman, Bob and Dara Dick, Karen Disbrow, Trish Ditsworth, Linda Donelson, Chris Edwards (leader), Linda Fisher, Bruce Gardner, Ken Hunt, Ken Lowder, Richard and Nancy Lynch, Linda Rudolph, Bill Scheible.

Birds (67 species): Greater White-fronted Goose, Snow Goose, Canada Goose, Wood Duck, Gadwall, American Wigeon, American Black Duck, Mallard, Blue-winged Teal, Northern Shoveler, Northern Pintail, Greenwinged Teal, Canvasback, Ring-necked Duck, Lesser Scaup, Bufflehead, Hooded Merganser, Red-breasted Merganser, Ruddy Duck, Ringnecked Pheasant, Pied-billed Grebe, American White Pelican, Double-crested Cormorant, Turkey Vulture, Bald Eagle, Northern Harrier, Sharp-shinned Hawk, Red-tailed American Kestrel, Killdeer, Pectoral Sandpiper, Wilson's Snipe, Ring-billed Gull, Rock Pigeon, Mourning Dove, Belted Kingfisher, Red-bellied Woodpecker, Downy Woodpecker, Northern Flicker, Eastern Phoebe, Loggerhead Shrike, Blue Jay, American Crow, Horned Lark, Tree Swallow, Black-capped Chickadee, Goldencrowned Kinglet, Eastern Bluebird, American Robin, European Starling, American Tree Sparrow, Field Sparrow, Vesper Sparrow, Savannah Sparrow, Fox Sparrow, Song Sparrow, Dark-eyed Junco, Northern Cardinal, Red-winged Blackbird, Eastern Meadowlark, Western Meadowlark, Rusty Blackbird, Common Grackle, Brown-headed Cowbird, American Goldfinch, House Sparrow, Eurasian Tree Sparrow.

- Chris Edwards



#### IOWA CITY BIRD CLUB MEMBERSHIP RENEWAL FORM

Please send this form with your annual membership dues to Eastern Iowa Birdwatch, Bernie Knight, 425 Lee Street, Iowa City IA 52246. Annual dues are \$15 per household or \$10 for students. Members receive a 10% discount on bird seed at Bird's Eye View in Coralville.

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## Iowa City Bird Club

*Eastern Iowa Birdwatch* is published three times per year (usually April, September, and December). Members are encouraged to send articles, reviews, notes, and comments to editor Chris Edwards, 4490 Daniels Cir. NE, Solon, IA 52333, or e-mail at credwards@aol.com.

**Annual membership dues** are \$15 per household or \$10 for students, payable by January 1st for the coming year. Make checks payable to Eastern Iowa Birdwatch, and mail to Bernie Knight, 425 Lee St., Iowa City, IA 52246. Check your mailing label for the year you have paid through.

**For general bird club information,** contact Iowa City Bird Club president Chris Caster at 339-8343 or <a href="mailto:cjcaster@earthlink.net">cjcaster@earthlink.net</a>.

**To lead or suggest a field trip,** contact field trip coordinator Karen Disbrow at 339-1017. **The club web site** is maintained by Jim Scheib and is located at <u>icbirds.org</u>.

Eastern Iowa Birdwatch Chris Edwards, Editor 4490 Daniels Cir. NE Solon, IA 52333

