

# THE STILT

BRIDGERLAND AUDUBON SOCIETY

Volume 21, No. 6

February 1993

## 1992 CHRISTMAS BIRD COUNT

What a great year for the Christmas Bird Count!

The general trend, as usual, appeared to be driven by weather. Early snow and low temperatures in the previous weeks drove out the less hardy species and pushed northern species into our valley. Most of these northern birds have apparently already left the area and have been real difficult to find, even two days after the count.

Eleven area leaders, with a total of 52 participants, covered the count circle from as early as 12:30 a.m. (John Barnes) until 6:00 p.m. on December 19. Several parties were owling in the dark. Ron Ryel and Peggy Wood skied up Green Canyon in the dark with head lamps.

We tallied 14,152 individual birds of 94 species. Four of these birds were seen for the first time ever in our CBC. These included a ferruginous hawk near Hyde Park, two long-eared owls at the mouth of Smithfield Dry Canyon, a swamp sparrow near Logan landfill, and two lapland longspurs near Amalga.

This is only the sixth year in the 17 we have kept records that we have seen more than 90 species.

Other interesting species observed on the count were four tundra swans, two greater scaups, one hermit thrush, 1200 rosy finches and two common redpoll. The flightless white pelican affectionately named "Pelican Pete" was seen in apparently good health spending his sixth year on the spring fed pond at the fish hatchery on Valley View Highway.

Interesting highs and lows would have to include 1200

rosy finches feeding on windswept hills in Smithfield Canyon. Green-winged teal were not seen on the count for only the second time in 17 years. Raptors were well represented with rough-legged hawks and prairie falcons at or near record highs. Bald eagles were down probably because most fishing waters were frozen. Killdeer were not seen for the first time ever. Seven species of owls were observed. Song sparrows were at record high numbers.

There were 25 species represented by only one or two individuals. Twenty species were seen in multiples of 100 and three species with 1000 or more.

The potluck dinner was enjoyed by a group of tired birders still eager to ooh and ahh over each others good sightings. Thanks to Kim Sullivan and Bruce Pendery and new baby for the use of their home for the compilation dinner.

Everyone involved paid \$5.00 toward the publishing of results. This has always been an enjoyable winter activity for those involved. Thanks to all those who participated. Join us next year.

— Keith Archibald

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# CALENDAR

**Thursday, February 11.** General Meeting. 7:30 p.m. in the Logan City Meeting Room, 255 North Main. "Watchable Wildlife in Utah." Bruce Anderson, head of regional information and education manager for the Utah Department of Wildlife Resources, will present a program on "watchable wildlife" and its economic value to local communities. We will learn about a national program and a state program to promote non-consumptive use of our wildlife. Bruce is also anxious to open a discussion to assess the needs of Cache Valley for environmental education opportunities. Bring lots of creative ideas with you.

**Wednesday, February 17.** Planning Meeting. 7 p.m. at Tom and Pat Gordon's home.

**Tuesday to Sunday, August 3-8.** Rocky Mountain Regional Conference in Utah. Time to mark your calendar for next summer's Rocky Mountain Regional Conference at Snowbird, Utah. There will be ample time for workshops, field trips, social interaction and keynote addresses, etc. Look for more detailed information in the next issue of *The Stilt* regarding cost, lodging, meals, field trip registration, etc.

## Winter Field Trips

**Saturday, February 6.** The Annual Bald Eagle Day sponsored by the Utah Division of Wildlife Resources. Note change of date. We will leave at 1 p.m. from the southwest corner of Fred Meyer's parking lot and return about 5 p.m. We will drive to the Willard Bay Marina to watch the bald eagles as they fly in from feeding and roost in the large cottonwoods around the Willard Bay Park. DWR biologists will be on hand to tell about bald eagles in Utah.

**Saturday, February 13.** Know Your Conifers. Rob Lillieholm will lead his ever-popular walk around the university campus to help participants discover how to tell a spruce from a fir, or determine how much growth a tree puts on each year. Meeting 1 p.m. at the information desk in the Taggart Student Center and return by 3 p.m. or so. The walk will be on sidewalks for the most part. Dress warmly. Bring some friends to introduce them to Audubon. If in doubt about the weather call Rob at 752-4793.

**Saturday, February 27.** Beaver Along the Bear River. Beaver are abundant along the Bear River west of Logan. They den in high banks and cut willows and cottonwood for winter food. This is a good chance to discover what a beaver has been doing from the sign it leaves—trails, den, trees cut and food storage. Roast marshmallows over an open fire while trip leader Al

Stokes recounts the history of the early fur trade in Cache Valley. A fine outing for families. Just wear good boots or galoshes and dress warmly. Leave at 1 p.m. from the southwest corner of Fred Meyer's parking lot and return by 4 p.m. If in doubt about the weather call Al Stokes at 752-2702.

## CACHE HIKERS WINTER SCHEDULE

Cross country trips and a snowshoe excursion round out the outings for the winter season of Cache Hikers. Each trip leaves at 10 a.m. from the southwest corner of Fred Meyer's parking lot and returns around 2 p.m. Winterize your equipment and clothing and come join us for one or all the trips.

Cross Country Trips: February 13 and 20.

Call Kennita at 753-8415 or Jim Sinclair at 752-0061 for further information.

—Kennita Thatcher

## SAME TIME, NEW STATION

The editors of *The Stilt* will lovingly accept any and all article submissions for the newsletter no later than the 15th of the month.

Our new address:

Lois & Randy Olson  
280 N. 300 E.  
Logan, UT

## CACHE RECYCLING COALITION NEWS

At the last Cache Recycling Coalition (CRC) board of trustees meeting (10 December 1992), new officers were elected. The new CRC president is Howard Deer (750-1602), president-elect is Keith Shaw (752-1087).

The coalition will continue to be involved in the county solid waste planning process. Barr Bentley and Keith Shaw are preparing a presentation to be made at the February Solid Waste Advisory Board meeting. This board advises the Cache County Council on landfill and other solid waste issues.



CRC is excited to see curbside recycling in the form of TC Recycling Inc. come to Cache Valley. CRC annual awards dinner is scheduled for early March. At this meeting the coalition honors individuals and organizations that have made significant contributions to recycling and waste reduction in the past year. It is also an opportunity for members and other interested persons to have a good time. The Recycling Coalition welcomes new members, renewing members, active and passive members. Call 563-3096 for more information on CRC or local recycling efforts.

— Nancy Fox

## HOTLINE

**BULLETIN!** We have decided to rename this column The Pitkin Report, to acknowledge that birds frequenting our flyway have designated Will and Teri Pitkin's house as some sort of Super Triple Gold Crown Best Western bird hostel. The motto seems to be "go south if you must, but don't forget to bide a while at Pitkin's Pit Stop in Hyde Park." This weekend's visitors included a flock of 150-200 gray-crowned rosy finches, the very ones that dozens of us bird-persons have been driving around in the snow looking for since John Barnes reported massive numbers of them on the Christmas Bird Count.

Looking out at the winterscape from Will's nice warm dining room, sipping coffee and watching the rare visitors scramble two-deep for sunflower seeds on the feeder tray, I asked the innkeeper what his secret was. "Keep your feeders full," he said simply, with the wisdom of a true master. This can be a daunting task when one has hundreds of needy mouths importuning at one's soup kitchen, and feeder platforms on both sides of the house, and some kind of invisible neon sign blinking atop the house to beckon avian passers-by.

I think it also helps to live in the foothills. Perhaps the ferocity of the winter of '93 has forced not just deer and elk down from the high country, but also some alpine birds for which Cache Valley is "south," such as the rosy finches. Do remember, if you're feeding the little creatures, that they get in the habit of eating at your restaurant and if you close down for several days when it's bitter, the poor things may starve to death. A bird the size of a mountain chickadee can't go more than 24 hours without eating. January 23.

### Other (older) Pitkin Bird Excitement

Thanksgiving afternoon Will phoned to report a northern shrike was dining on a finch in his garage. Spouse and I left our turkey in the oven and dashed right over. Sure enough, there was a shrike sitting up in the rafters,

keeping an eye on its own Thanksgiving dinner (impaled on a twig sticking out of Will's woodpile). The young male bird was a textbook example of "shrikeness" and we had a splendid bird's eye (sorry) view.

As Christmas approached Will marshalled the troops to his house again, this time to huddle in the dining room in the dark, waiting for the appearance of a great gray owl he's watched hunt from his feeder for two nights previously. The second night the owl took a banty hen from the Pitkin's chicken coop. Will had looked the owl right in its yellow eyes through the plate-glass patio door and watched, awestruck, as it spread its huge wings and took flight, but we were not so lucky. (Then again, we pondered afterwards, how many chickens does one owl need to eat during a 24-hour period?)

### Other (non-Pitkin) Bird Excitement

- Bobbie Cleave Bosworth fed a flock of 70 rosy finches at her home on Hyde Park bench Jan. 3.
- Lenna Baldwin of Logan reported two loggerhead shrikes at her feeder during the snowstorm Jan. 2. She's also had sharp-shinned hawks.
- Jim Parrish, a wildlife biologist at BioWest, has watched two bald eagles around his home near Porcupine Dam since Thanksgiving. On Christmas Eve he had seven sharptailed grouse in his yard.
- Bill Ehmann saw a Lapland longspur on the Christmas count.
- Reinhard P. Jockel saw a hooded merganser Thanksgiving Day on the new Logan golf course, and a hermit thrush on Christmas Eve on Canyon Road.
- Larry Ryel saw a white-phase gyrfalcon winging its way over Smithfield Jan. 6. He also reports a Bewick's wren has been dining on peanut butter and suet at his feeder in Logan since November, and he has a couple of white-throated sparrows as well.
- Keith Archibald reported a "great hawk study" available on 4200 North, west off of Highway 91. This is the first county road you can turn left on after you pass the Juniper Inn going north. Drive west to the first fence and power lines, and hawks will be everywhere, he said—so we went last weekend and boy, was he right! Saw 10 gorgeous rough-legged hawks, a ferruginous and a red tail, and an immature bald eagle. There must be a New York City-size population of rodents beneath the snow there.

Don't stop thinking about birds—and call when you see something worth sharing. Speaking of which, the winter crew of several dozen Barrow's goldeneye is now diving at First Dam.

— Nancy Williams, 753-6268



# BANQUET RECOLLECTIONS

As many of you experienced first-hand, the BAS Awards Banquet was a great gathering of the hopeful on a slushy January night. Hopeful, you may question? I think that quality characterizes Audubon members and supporters; if they weren't hopeful, they wouldn't bother with conservation and education awards, and they wouldn't be such a cheerful group en masse. The crowd itself was a conjunction of Logan's finest, if I do say so myself.

The Bullen Center proved to be a fine facility for our crowd of about 150. Dinner by Dan Kramer of The Cottage was a tasty delight—especially the baked halibut—and his handsome servers gave the event an air of professional elan. After the sumptuous array of hors d'oeuvres and beverages produced by Elizabeth Walker and a bevy of willing donors, we were primed to fully appreciate the evenings pleasures.

One unexpected pleasure which came our way was the assistance of Ruth Ann Ryan. She is the proprietress of a beautiful shop called The Jackson Connection. As our theme was Native Americans, she brought many works of art either by or about Native Americans to set the mood for our festivities. Thanks to her, it really LOOKED like a party! The Jackson Connection is in downtown Logan, at 21 Federal Avenue, across from Baskets Etcetera. Ruth Ann describes it as "a touch of Jackson in Logan." The shop features Western and Indian art, and gifts of nature. Many of the artists represented are Native Americans working in traditional forms.

An expected pleasure was our master of ceremonies, Val Grant. He bubbled all over the podium for us, announcing and introducing and such, inimitably. Others on stage who made us proud were our award-givers and takers, Kayo Robertson and Steve Archibald, who gave and received the Carl Johnson Teacher of the Year Award. Steve said, "Getting an award for doing what I love to do—it doesn't get any better than this!" He also acknowledged the assistance and support of his wife, Toni, which I, as another wife, appreciated and hereby broadcast. Alice Lindahl managed to persuade Professor Emeritus Jay Bagley, of the Utah Water Research Lab, to attend and accept the Allen Stokes Conservation Award in recognition of his work to protect the Bear River from unseemly development. As Alice said, "Jay kept telling me, 'Alice, if you give people the right information, they'll come to the right conclusion.'" The conclusion appears to be that for the first time ever, a proposed Water Conservancy District was defeated, and work is now proceeding on water planning without the encumbrance of a tax-collecting body authorized to dam and sell the Bear River.

Our speaker for the evening, Dr. Barre Toelken, came with one arm in a sling, but with a wonderful arsenal of coyote stories, old and new. We all got a glimpse of the Navajo culture, which promotes group strengths like

sharing and cooperation over individual strengths (or flaws) like competitiveness and ambition. He explained how the coyote stories each moral values as well as practical lessons, as when Coyote fails to respect a plant with laxative properties. There's difference in the use of humor: Navajo's punish their children by laughing at them, and Barre played a tape of children laughing when Coyote was just ridiculously wicked. Another difference is implied in the advice of a storyteller: "Don't be so concerned with how a story ENDS." Dr. Toelken said that Navajo children are getting one set of moral values at home and an opposing set at school, where they are encouraged to look out for Number One more than to find harmony with society and nature. The children bear the brunt of the cultural clash. Among the young, he hears skinwalker stories, anecdotes of evil ghosts and witches witnessed in real life.

Val Grant presented Dr. Toelken with one of Jerry Fuhrman's mischievous coyote paintings, custom-designed for the occasion. The work was donated to Audubon, and the desired result was obtained: Toelken was very pleased.

Thanks to all who contributed, the evening was warm and memorable. As an undedicated organizer, I felt amply rewarded by the general willingness to help. Dianne Browning and the staff at A Book Store took over the task of handling tickets and money, thereby making all else possible. To each of you who contributed time, talent, food, decorations, and your irreplaceable presence (notably Laura in her fathers) to the occasion, I say, "Let's do this again sometime!" And to those of you who didn't make it, "See you there!"

— Pat Gordon

P.S. Treasurer Sue Robertson thinks we almost succeeded in making the banquet self-supporting. We await the next treasurer's report for the bottom line.



## APPRECIATION FROM HAWKWATCH

"Dear Friends,

Thank you for your recent generous gift of \$150.00. Your contribution is being matched dollar for dollar by a generous donor to strengthen our scientific research on behalf of raptor conservation throughout western North America.

Your friendship is held in high esteem here at HawkWatch.

Thanks so much for your support. Your generosity is an inspiration to all of us. We shall continue working vigorously to monitor and protect our majestic birds of prey. Please keep in touch.

Happy New Year! May all your dreams come true in 1993, including lots of magnificent raptors soaring overhead!

Warm wishes,

Stephen W. Hoffman  
Executive Director

P.S. I really enjoyed my visit in December, and look forward to keeping in closer touch—move to SLC still planned for late May. THANK YOU!"

## MINUTES OF DECEMBER PLANNING MEETING

Attending: Al Stokes, Alice Lindahl, Kayo Robertson, Steve Archibald, Dick Mueller, Dawn Holzer, Bruce Pendery, Bill Ehmann, Nadene Steinhoff, Ron Hellstern, Chris Sands, and Peggy ??.

Note Taker: Bruce Pendery

Peggy, who was representing the Forest Service, said they wanted to give their remaining Logan Canyon Guides to BAS. We could sell them and keep the proceeds. Kayo Robertson, the author of the Guide, had no problem with this arrangement and did not want any compensation. We were thrilled by the proposal, and Al Stokes agreed to get the books and work with Barbara Russmore to market them.

Steve Archibald and Kayo Robertson discussed the growth that has occurred with the Junior Naturalists (there are about 65 participating), and asked that BAS consider taking the Junior Naturalists "under its wing." They presented a proposal with their plans and ideas (see following article) and asked that we consider it.

We were excited by this proposal and agreed to it, with a few points being made:

1. The Naturalists will work most directly with Jack Greene and the Education Committee.
2. We may try to have a page in *The Stilt* dedicated for the Young Naturalists.
3. Bruce will discuss liability problems and the cost of liability insurance with Bob Turner, Bob Atwood and Sue Robertson.
4. It may be appropriate to give BAS members a discount on the annual fee.

Alice next presented a video prepared by National Audubon regarding population growth and its consequences, both in less developed countries and in the U.S. The program pointed out the pitfalls of unrestrained and unmanaged population growth, however, it advocated innovative, locally-based solutions to the problem rather than highly centralized top down approaches.

Nadene discussed upcoming lobbying efforts at the state legislature. Watchable wildlife, the linking of water development to concomitant conservation projects, and the adoption of Earth Summit language on sustainable development may receive attention this year.

It is also possible some state level efforts will be made to lobby for an air quality monitoring station in Cache County. Regardless, Ron plans to begin selling this idea locally. He will take this proposal before the Logan City Council on January 7 and the Cache County Council on January 12. It would be great if you could attend, too.

Bruce and Nadene provided an update on Logan Canyon. The Final Environmental Impact Statement will "be out soon" (January-March ???). Nadene has been working with Nancy Williams and Scott George to begin preparing a mailer which will go out when the FEIS is released. Bruce said he had met with Heidi MacIntosh, an attorney who is new to Cache County and who is willing to help with Logan Canyon.

Alice mentioned that the Bear River Symposium will be held on 6, 7, and 8 April, 1993. We have been asked to provide a representative for panel discussions.

Alice has also been working with Margaret Pettis, and they have developed plans for a "Crane Day" in March or April. The purpose would be to build public support for protecting cranes, something we'll need as the Wildlife Board considers the crane hunt in the future.

Finally, we agreed to provide a \$150 donation/honorarium to Steve Hoffman and HawkWatch International for his recent presentation at our monthly meeting and because of our support for his efforts.



# JUNIOR NATURALISTS

## Proposed Changes

- A. Name change: Because our group is getting older, we would like to change our name to *Audubon's Young Naturalists*. We don't want "junior" to turn any of our teenage participants away.
- B. Fees
  1. In the past, we have charged a minimal fee (\$1.00 or so) per activity. This helped offset most of our costs (snacks, transportation, etc.). There hasn't been a yearly membership fee. We would like to continue the \$1.00 activity fee.
  2. We would like to strengthen our ties to Bridgerland Audubon by having each *Young Naturalist* pay a \$10 yearly fee. The fee would be reduced to \$5 for any additional family members. This fee would go to the Audubon Educational Fund for use as they see fit ("Audubon Adventures, etc.). Bridgerland Audubon would receive their membership in the *Young Naturalists* at half price.
  3. For the fee they would receive a *Young Naturalists* version of *The Stilt* (quarterly) or perhaps they could receive *The Stilt* and the *Young Naturalists* could have a section with news and announcements from the group.
  4. Members would be entitled to participate in regular activities.
- C. Activity schedule
  1. One "field" activity per month would be held with a limit on the numbers who could attend. Members would sign-up through a parent calling channel.
  2. One afternoon-evening educational program would be held each month that would cover various topics of interest. Any member, family member or community member would be invited to attend.
  3. A quarterly "service project" would be conducted in conjunction with the Forest Service, city or county projects, public relations, etc.
- D. Questions
  1. Is there any value in this group for Bridgerland Audubon?
  2. Is the group covered by any liability insurance?
  3. Suggestions? Ideas?

# CONFLICTS IN NATURAL RESOURCE MANAGEMENT: INTEGRATING SOCIAL AND ECOLOGICAL CONCERNS

*A symposium sponsored by The College of Natural Resources, USU, April 21-23, 1993 at the Eccles Conference Center.*

**Purpose:** The purpose of this symposium is to examine conflicts in natural resources management to consider how social and ecological concerns can be integrated. The symposium will explore aspects of contemporary natural resources conflicts to help participants better understand how to develop public policies and management strategies which are scientifically sound, socially responsive, and ecologically sustainable. Participants will have the opportunity to hear prominent speakers and to engage in open-forum and informal discussions with people actively involved in finding ways to solve difficult natural resources conflicts.

## Who Should Attend?

Government officials, educators, students, private consultants, representatives of non-profit organizations, and members of the general public who have an interest in the management of natural resources will find the symposium worthwhile.

**Agenda:** An opening forum focusing on the past and future of resource conflicts will be held Wednesday night, April 21, 1993. Speakers on April 22 will provide frameworks for understanding natural resources conflicts and discuss the perspectives of various broadly defined interest groups. The final day, April 23, will focus on case studies of integrated resource management and of contemporary resource conflicts from around the United States. Speakers will include Orville Daniels, Steve Harper, Lynn Huntsinger, Robert Keiter, Edwin Marston, James Mattson, Terrence Moore, George Reiger, Marc Reisner, Jeff Romm, Jim Rouche, Charles Wilkinson, and others.

**Registration:** The registration fee for this conference will be \$60 if paid by April 7, 1993 and \$80 after April 7, 1993. Registration fee includes conference admission, program materials, refreshment breaks, and campus parking. Symposium attendees may order a published copy of the proceedings at a discounted price of \$15.

Utah State University course and extension credit as well as Society of American Foresters CFE credit are available to conference attendees.

**For Further Information:** Dr. Joanna Endter-Wada, College of Natural Resources, Utah State University, Logan, Utah 84322-5215; 801-750-2487 (office) or 801-750-4040 (FAX) or Lisa Anderson, Conferences and Institutes Division, Utah State University, Logan, Utah 84322-5005; 801-750-2302 (office) or 801-750-3771 (FAX).



# POPULAR HIKES TO BE MADE INTO INTERPRETIVE TRAILS

Come next spring, visitors can go for a hike along the Riverside Nature Trail and the Limber Pine trail, and learn about nature at the same time.

A brand new set of interpretive signs will be set along both trails to replace brochures and markers along the trail that were generously provided by the Bridgerland Chapter of the Audubon Society.

"Posts were often missing and it was had to get pamphlets out to people," said Peggy Linn, forestry technician for the Logan Ranger District.

But the idea of having an interpretive trail was a good one, she said, so they decided to try something else.

The district is now in the process of producing 12 stations and signs for the Riverside trail. The theme,

"Rhythms of Life," was chosen to highlight the riparian area along the Logan River. The trail winds its way along side the river for 1 1/4 miles between Spring Hollow and Guinavah-Malibu campgrounds.

Linn said the district commissioned Jane O'Keefe, a Mendon artist, to do the drawings for the signs.

The Limber Pine trail, near the Bear Lake overlook, will have 12 similar stations and signs, she said. However, the theme for this trail, "Connections," is geared more towards grade school and junior high school-aged children.

— The Juniper Station  
Logan Ranger District  
Winter 1993



Each station on the trails will have an interpretive sign, designed by Mendon artist Jane O'Keefe, with illustrations, questions and facts about nature.



## REGIONAL NEWS

### ROCKY MOUNTAIN ENVIRONMENTAL DIRECTORY AVAILABLE

Environmental problems in the Rocky Mountain states increase daily in number, scope, and complexity. It is more important than ever that environmentalists know one another, band together to share resources, and collaborate to resolve problems; now those tasks are made easier.

A 366-page, soft-cover book, the *Rocky Mountain Environmental Directory*, contains 1800 listings of citizens groups, government agencies and others involved in environmental education and environmental action in the states of Colorado, Idaho, Montana, Utah and Wyoming. Listings are arranged alphabetically by state, with indexes to 43 descriptors chosen by the groups to represent their interests (e.g., Lakes, Rivers, Streams, Wetlands, Land Preservation, Mining, Native American Approaches, Noise Pollution, Parks and Trails, Peace and Disarmament, etc.) and an index to organizations with environmental education programs. It is planned to update and reprint the directory biannually.

The Directory is available for \$20 including postage. To order, send a check to: Rocky Mountain Environmental Directory, 8850 O'Brien Creek Road, Missoula, MT 59801. For information about network access, diskettes, and bulk order discounts, please call Lynn Tennefoss, Project Manager, at (406) 543-3359.

### TUCSON A.S. DESERT ECOLOGY INSTITUTE

Tucson A.S. is sponsoring its twenty-third annual Institute of Desert Ecology, April 15-19, 1993. The camp is set against the spectacular backdrop of the Santa Catalina Mountains in Catalina State Park. The program, led by six expert instructors in field studies, will focus on Sonoran Desert ecosystems and the relationships between plants, animals and the physical characteristics of the desert. Participants furnish their own tents or campers, food is catered on site. University credit is available, as well as a few partial scholarships. Cost is \$275/person. For more information, contact the Institute Director, Cynthia Lindquist, Tucson Audubon Society, 300 E. University Blvd. #120, Tucson, AZ 85705, Tel: (602) 629-0757.

## BIRD-WATCHING BIOLOGISTS SEE EVOLUTION ON THE WING

The work of evolution is usually done on a time scale of millennia, too protracted for scientists to witness. So biologists were surprised by a finding that a bird known as the blackcap had evolved an entirely new migration pathway in a mere 40 years, right under the watchful binoculars of Europe's devoted bird enthusiasts.



Eric Hosking, National Audubon Society/  
Photo Researchers

The blackcap, a European wood warbler and relative of American gnatcatchers and kinglets, appears to have developed the genetic program for an entirely new migration route that shuttles it each winter from Central Europe to England rather than to the warmer climes normally sought by these birds in the western Mediterranean.

"The really surprising thing was that the adaptation to this new migratory behavior developed so rapidly," said Dr. A.J. Helbig, a postdoctoral researcher at the University of Heidelberg. He was an author of the new study in the current issue of the journal *Nature*. "It's the first demonstration that evolutionary processes can be much quicker than we thought," he said. Researchers have been increasingly concerned about the ability of long-distance migrants to adapt to myriad changes in their environment as humans alter the planet ever faster.

"Long-distance migrants breed in one place, overwinter in another and pass through any number of habitats in between," said Dr. Frank Moore, an ornithologist at the University of Southern Mississippi. "Looking at this from the positive side, the paper shows the birds can respond rapidly. That's why this is so exciting."

But Dr. Moore cautions that while blackcaps seem able to adapt their migrating habits quickly, such evolution may not be a solution to all changes, particularly the habitat degradation commonly experienced by migrants.



"If the change is simply destructive," he said, "if a bird is given no alternatives, it doesn't matter how much genetic variability you have or how rapidly you adapt."

Researchers also expressed excitement over the study's support for the newly emerging idea that birds may be able to serve as accurate indicators of climate change.

Scientists say the blackcaps' migratory shift is typical of changes that have been seen in bird species around the world. For more than a century, ornithologists have noticed increasing numbers of species venturing farther and farther northward to pass the winter.

By showing that blackcaps were genetically programmed to fly to England, the study indicated that the recent worldwide changes in bird migration might be more than short-term behavioral adjustments to the weather. If the changes in blackcaps are any indication, Dr. Helbig said, the large-scale alterations in bird migration could likewise be genetic changes, the result of rapid evolution in action.

"The genetic evidence, that is the real news," said Dr. Paul Kerlinger, director of the Cape May Bird Observatory, a center for bird migration studies operated by the New Jersey Audubon Society. "We know that migration can change in very short periods of time, but being able to link those changes to a genetic component, these researchers have taken it two, even four or five steps beyond what's been done before."

Blackcaps are found across all of Europe, north to where the forest retreats from the cold, south to the Mediterranean and east to the Ural mountains in Russia.

Before 1950, birds seen in Britain were either those there to breed for the summer before moving on to winter farther south, or those passing through during fall migration on their way from Scandinavia to sunnier climes.

Since that time, birdwatchers have noted a steady increase in the blackcaps wintering in England. Today the birds can be counted by the thousands during the winter in England and ornithologists have found that many of the birds carry tags indicating that they spent the summer breeding in Germany and Austria.

### **'Ingenious, Meticulous' Experiments**

To test whether a genetically altered migration program was causing these birds to deviate some 800 miles from the rest of the birds leaving Central Europe each fall, researchers from the Max Plack Institute in Radolfzell, Germany, collected birds from Weston-super-Mare, about 100 miles east of London on the Bristol Channel.

In what Dr. Kerlinger praised as "ingenious, meticulous" experiments, Dr. Peter Berthold, Dr. Helbig and colleagues removed the birds to Germany and bred 41 experimental young birds over two seasons, along with birds caught in Germany for comparison. Since all the

experiment had never been out of Germany and were subject to the same environmental cues, the researchers said, the only way for them to find their way to England would be through a genetically encoded map.

The birds' preferred migratory path was tested by putting them in covered cups lined with typewriter correction paper on which, as they tried repeatedly to take off, their feet scratched out their preferred direction in tiny birdprints on the painted paper.

The offspring of birds that had wintered in England left tracks in a direction northwest from Radolfzell, Germany, toward Weston-super-Mare, England. The offspring of birds that had wintered in Germany, by contrast, left tracks headed on the birds' standard route southwest toward the Mediterranean.

The researchers pointed to the birds' preferences for different migratory paths as evidence that they were guided by a map programmed into their genes. Researchers say that as much as 10 percent of the population that breeds in Central Europe and once went en masse to the Mediterranean in winter now heads instead for Britain.

### **Birdseed and Evolution**

Commenting on the study in *Nature*, Dr. William J. Sutherland of the University of East Anglia in Britain suggested that blackcaps might have been encouraged to pass the winter in Weston-super-Mare by the many Britons who put out birdseed. By fattening up the first few blackcaps whose genetic mutations brought them to England, bird lovers have given these creatures a better chance for breeding upon return to Central Europe in the summer.

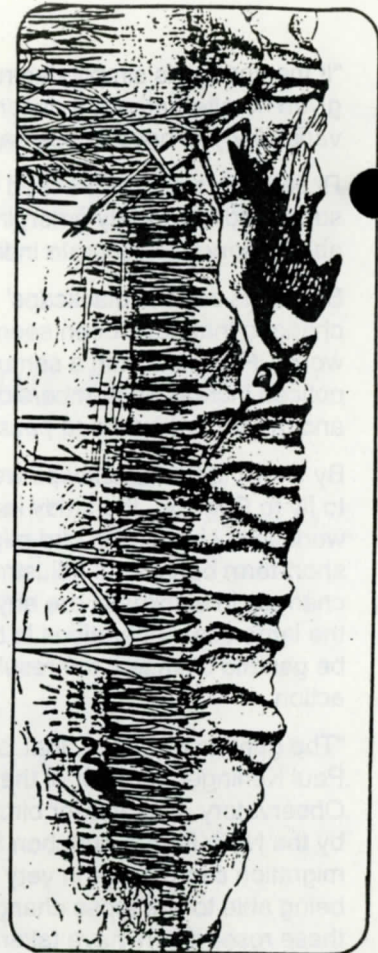
The growing popularity of feeding winter birds both in America and Europe may be influencing migratory paths and populations world-wide, researchers believe. Those sunflower seeds and clumps of suet people put in their yards may thus in their own small way be influencing the course of evolution.

— Carol Kaesuk Yoon  
*New York Times*



# THE STILT

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Logan, Utah 84321



Mervin & Mae Coover  
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Logan, Utah

The Bridgerland Audubon Society meets the second Thursday of each month, October through May, in the Meeting Room of the new Logan City Building, 255 N. Main. Meetings start at 7:30 p.m. The BAS Planning Committee meets at 7 p.m. on the third Wednesday of each month, September through May, at the home of Tom and Pat Gordon, (718 North 200 East, Logan). Everyone is welcome to attend.

President	Bruce Pendery, 750-0253
Vice President	Dawn Holzer, 753-6047
Secretary	Tom Gordon, 752-6561
Treasurer	Susan Robertson, 752-4598
Conservation	Alice Lindahl, 753-7744
Education	Jack Greene, 563-6816
Membership	Al Stokes, 752-2702
Field Trips	Al Stokes, 752-2702
Newsletter	Lois & Randy Olson, 752-9085
Circulation	Tom Gordon, 752-6561
Publicity	Chris Sands, 755-9524
Hospitality	Bill & Marjorie Lewis, 753-8724
Hotline	Nancy Williams, 753-6268
Recycling	Marvin & Irma Moon, 753-4698
Legislation	Nadene Steinhoff, 753-0317
Trustees	
1990-93	John Barnes, 563-3910; Rebecca Echols, 753-2367 Richard Mueller, 752-5637
1991-94	Keith Archibald, 752-8258; Ron Hellstern, 753-8750 Bill Ehmann, 752-1684
1993-95	Pat Gordon, 752-6561; John Sigler, 753-5879

Membership in the Bridgerland Audubon Society includes a subscription to *The Stilt*, as well as the *Audubon* magazine. The editor of *The Stilt* invites submissions of any kind, due on the 15th of each month. Send to 280 N. 300 E., Logan, UT 84321.

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## National Audubon Society Chapter Membership Application

Yes, I'd like to join.

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

☐ My check for \$20 is enclosed.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

Please make all checks payable to the National Audubon Society.

Send this application and your check to:

**National Audubon Society**

Chapter Membership Data Center

P.O. Box 51001 • Boulder, Colorado 80322-1001

LOCAL CHAPTER



**Bridgerland Audubon Society**  
P.O. Box 3501  
Logan, UT 84323-3501

W-52

Local Chapter Code  
7XCHA

Subscriptions to *The Stilt* are available to non-members for \$5.00 per year. Call Tom Gordon, 752-6561. Also, call Tom for new subscriptions or address changes.