NEXT MEETING

May 8, 2001

AN OVERVIEW OF HUMMINGBIRD BANDING IN LOUISIANA

PRESENTED BY

DAVE PATTON

LSUS Museum of Life Sciences

6:30 p.m.

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MAY FIELD TRIPS

LOUISIANA ARMY AMMUNITION PLANT - MAY 6
NORTH AMERICAN MIGRATION COUNT - MAY 12
BOARD OF DIRECTORS
2000 - 2001
OFFICERS

President                  Mac Hardy (1)  797-5338 W, 687-6738 H
Vice-president             Larry Raymond (2)  929-2806 W, 929-3117 H
Secretary                  Jeff Trahan (1)  869-5217 W, 868-7360 H
Treasurer                  Jean Trahan (3)  869-5013 W, 868-7360 H

MEMBERS AT LARGE
Donna Burney (2)  686-7820 H
Roy Bott (1)  925-2265 H
Bertha Campisi (3)  688-3446 W, 861-0324 H
Terry Davis (3)  682-0361 B, 741-1115 H
Hubert Hervey (3)  925-9249 H
Pat Hervey (1)  925-9249 H
Jim Ingold (1)  797-5236 W, 742-5067 H
Lily Poole (2)  687-2994 H
Rosemary Seidler (1)  869-5231 W, 424-2972 H
Will Smolenski (2)  865-2938 H
Judy Townes (3)  929-4106 W, 865-7412 H

Numbers in parentheses are years remaining of a 3-year term.

COMMITTEE CHAIRPERSONS

BIRD REPORT        Will Smolenski  865-2938 H
BIRD HOT SPOTS     Larry Raymond  929-2806 W, 929-3117 H
BIRD RECORDS       Mac Hardy  797-5338 W, 687-6738 H
FIELD TRIPS        Terry Davis  741-1115 H
                    Roy Bott  925-2265 H
FUND RAISING       Will Smolenski  865-2938 H
HISTORIAN and LIBRARIAN  Jim Ingold  797-5236 W, 742-5067 H
HOSPITALITY and SPECIAL EVENTS  Judy Townes  929-4106 W, 865-7412 H
MEMBERSHIP         Lily Poole  687-2994 H
NEWSLETTER         Jim Ingold  797-5236 W, 742-5067 H
BEGINNING BIRDERS  Jeff Trahan  869-5217 W, 868-7360 H
PHONE TREE         Rosemary Seidler  869-5231 W, 424-2972 H
PROGRAMS          Larry Raymond  929-2806 W, 929-3117 H
PUBLICITY          Judy Townes  929-4106 W, 865-7412 H
WWW HOME PAGE      Barney Poole  687-2994 H
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ABOUT THE PROGRAM

Our May speaker is Dave Patton - Hummingbird Master Bander. He was previously a sub-permittee with Nancy Newfield from 1995-2001. He is a past President of LOS, a charter Member of Lafayette Birders Anonymous, and a participant in various projects including: Migration Over the Gulf, as a platform observer.

His program will give an overview of hummingbird banding in Louisiana. It will also include data and pictures gathered over 3 years of two Rufous Hummingbirds. The study monitored their weight and molt leading up to the day of their migratory departure in the spring.

FIELD TRIPS

May 6 (Sunday) -- Louisiana Army Ammunition Plant. Depart at 7:00 a.m. from the Museum parking lot for a birding trip to the Louisiana Army Ammunition plant near Minden. Dan Weber will be our guide for this exploration (by car, very little walking) of a very large, diverse area that has been little explored by birders. We will be back in Shreveport by noon or so.

May 12 - NAMC (North America Migration Count). Leader: Hubert Hervey, 925-9249 (H). You bird where you want to for as long as you can. Keep records for each parish separate. Contact the leader for forms and instructions. Meet at Mac Hardy’s house (1823 South Brookwood Drive) from about 7 p.m. on, for the evening meal and to call the list. If you cannot attend the evening meeting, please phone you day’s results to Mac immediately (687-6738), so they can be included in the calling of the list.

MAY SPRING MIGRANT BIRD WALKS

A series of spring bird walks will be held each Saturday morning in May at Walter B. Jacobs Memorial Nature Park. BSG member and park naturalist John McBride will lead them. Average duration of walks is 1.5 hours. All bird walks will begin at 8:00 a.m.

Beginning Birding

Migration and How it Works

Don Richardson
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We tend to think of Neotropical Migrants as birds that live in North America and winter in Central and South America. Try thinking about them and their home in a new way. Ask, for example, how the Hooded Warbler really lives and try this for an answer. It lives in Central America, spending the time from late summer to early spring (as much as eight months) nomadically moving about with flocks of its own and other similar species. As spring approaches, it moves north to take a short hiatus from home to breed and raise young. At least a month is spent in transit - to and from. This leaves only about three months of living in the southeastern U.S. It sounds a bit like this Hooded Warbler lives in Central America, doesn’t it?

Scientists use words that describe plumage in a way that indicates that the breeding part of life is not the major part of life. Winter plumage is called "basic plumage," while breeding plumage is referred to as "alternate plumage." "Basic" certainly describes a more primary state than "alternate". Although breeding may not occupy a majority of a bird’s time, it is certainly one of the most important times of its life. Certainly, no species could survive without it, and there are several reasons why migration contributes to a successful breeding event.

Southern latitudes provide considerably better winter weather than most of us have here in North America. And during our summer, Central America is extremely hot while the southern temperate and Antarctic area is cold with ice and snow covering much of it. Insectivores (insect eaters) and frugivores (fruit-eaters) can find food, by moving south, that they could never find in a harsh winter environment. Certainly not all, but many of the birds that remain north in the winter eat seeds which are available in winter.

Northern summers have very long days that provide many hours for gathering food. Tropical days are only 12 hours long. Days in the north may reach 16 hours or more. It takes a great effort and a lot of time to gather enough food to feed three or four youngsters that will increase to 50 times their hatching weight in just 13 days. Northward migration expands the available nesting and food gathering area of the world.

Many migrating species occupy totally different areas, while some merely expand their range to the north in summer. Some individuals find nesting space to the north and others remain stationary. Eggs and nestlings cannot fly. Parents must be sure there is sufficient territory around the nest to support their voracious family. Predation is
diminished by the fact that a predator species depending on a particular bird species for food cannot evolve since the bird species is not available as a food source full time.

"I got rhythm; I got rhythm; I got rhythm; who could ask for anything more?" That's how the song goes and that's how the birds go. Phenology is the study of biological rhythms. Periodic activity such as flowering, reproduction, and migration all fall within this class of study. Words like circadian (daily), menstrual (monthly), circannual (annually) are used to describe these phenomena. Much of migration activity in birds is controlled by an internal clock operating on a circannual rhythm. Each year, at a certain time, their biological clocks signal that it's time to fly northward to breed.

Photoperiod (periods of light) actually refers to the ratio of day length to night length. Photoperiodicity may affect migration in some cases, when the birds are in the temperate zones where these ratios change. In the tropics, however, photoperiods don't have much effect. Days and nights are always 12 hours long on the equator. The triggers for migration are actually a complex combination of things.

We are all certainly aware that in North America the weather in spring gets "nice" in the south before it gets "nice" in the north. People who live in the northern U. S. and Canada migrate in droves to the southern borders of the U. S. for the winter. I have heard many conversations among them, about the right time to go back north. It always seems to hinge around the question "Is it too early?" Migrating birds have obviously also evolved a sense for this. We find that birds that nest in the south migrate early. Of course, the area in which they nest is ready for habitation early. We begin to see the Prothonotary Warbler and Louisiana Waterthrush in the latter half of March. Birds that nest in the north, however, migrate later since the area in which they nest is not ready for habitation until later. Gray-cheeked Thrushes don't show up in Texas until late April and early May. I plant most of my vegetables (Houston, Texas) around the first of March. My dad, I remember, always put the vegetables in on Memorial Day (in western New York). That's three months later, and it looks like birds have figured this out too.

The preparation for migration includes building fat reserves for energy. Southbound Yellow-rumped Warblers (which usually eat insects) are observed on Block Island (Rhode Island) gorging themselves on bayberries (wax myrtle). Long distance runners and other endurance athletes often do a "carbohydrate load" just before a big event.

At first, one might think that birds would migrate in straight lines, "As the crow flies" if you will. But there are many factors, variables, and reasons that cause birds to choose migratory routes other than straight lines. Some are well understood and some are not. Water provides an obstacle to some birds, while others cross it without hesitation. Many birds are not fond of flying over deserts or mountains, so they fly around them. Prevailing winds might cause a choice of different routes for movement north and south.

Loops represent a migration pattern with different routes for northward and southward migration. The American Golden-Plover moves north across the Gulf of Mexico to northern Canada and Alaska where it breeds. For the trip south, it moves east to Nova Scotia, then to the south over the Atlantic, returning to its winter home in Brazil.

A more local loop is seen in the Gulf of Mexico itself. Sometimes north winds accompany storms. In spring, these storms from the north present a serious danger to the birds migrating into them. In fall, the danger is less because the migration is southward (with the wind). In spring, many species tend to hug the Texas coast. This way a protective environment is more available should the birds get into trouble. In fall, however, the birds need not fear those northern storms. The winds merely help them to cross the gulf more quickly. Many species tend to fly over the center of the gulf, showing no desire to hug the coast. The local loop then, represents a more western northbound migration with the southward travel finding a path more to the east.

Doglegs are patterns of migration that are not a straight line. The reason for doglegs is to avoid (fly around) unfavorable areas. California Gulls winter all along the southern half of the California coastline. Some of them breed in Yellowstone and near the Great Salt Lake. A direct route would take them across miles of Nevada desert, a relatively barren and inhospitable environment for a gull. Instead they travel north up the coast to the Oregon/Washington border. They turn right and follow the Snake and Columbia rivers to the breeding areas. In fall they reverse the route.

Leapfrogging occurs where different subspecies (races) occupy different breeding ranges on the same axis as migratory flight. The races breeding the farthest north often winter the farthest south. In migration, the more northern breeders leapfrog over the more central races. On the west coast, five races of Fox Sparrow find themselves in this sort of situation. Shumagin, Kodiak, and Valdez races live in separate areas in Alaska; they all winter together in the southern part of California. The Yakutat race breeds at the Alaska - Canada border and winters near San Francisco. The Townsend race breeds in northern British Columbia and winters in Oregon. The sixth race, Sooty Fox Sparrow, doesn't migrate but winters and summers in northern Washington and southern British Colombia.

Vertical migration is a bit more local but still provides solutions for birds that prefer to breed in a place that is inhospitable in winter. Many mountain birds find seeds, fruits, insects, and space for breeding at high altitudes on
the flight feathers, the large feathers on the trailing edge of the wing and in the tail that do the flying, certainly not the coverts, the feathers that shape the bird and display most of the color. But mostly the downy feathers, little fuzzy feathers that lie underneath all these others. They are the major insulators against the cold.

Bare parts, parts without feathers, are a major problem for birds when it's cold. When our hands are cold, we try to put them somewhere where it's warm. We'll tuck them inside our jacket and under our arms, between our legs, or we might even sit on them. Birds can lose heat from their uninsulated parts like legs and bills. Birds on the beach that are standing on one leg are tucking the other into the soft feathers of the belly to keep it warm. The same is true of the bill when it's tucked snugly into the feathers on the back.

Ducks have some special problems with their legs. They have to use their webbed feet to swim in water that is nearly cold enough to be ice. Blood must flow to those feet and the resulting heat loss would be a disaster were it not for this handy mechanism. The blood vessels in its legs are attached to each other so that warm blood flowing to the feet give up heat to cold blood returning from the feet. Engineers call this a "heat exchanger" - they think they invented it.

Sometimes they shiver. The major muscles in most birds are the breast muscles, up to 40% of their total weight. These are the major source of heat generated by shivering. In some larger birds, the leg muscles also shiver. The LCT (Lower Critical Temperature) is the temperature at which shivering begins. Large birds have lower LCTs than small birds. That's not surprising since the rate of heat loss is going to be partly described by a ratio of body surface area to body volume. In small birds, their body surface area is high compared to their tiny volume. Body heat will not be held long so putting their heat maintenance mechanisms into action quickly is very important. In North America and in New Zealand, where House Sparrows have been introduced, a 100 year case study shows that the larger birds tend to survive better against the cold. Evolution has favored the larger birds in more northern (southern of course in New Zealand) regions. The House Sparrows in colder regions now average larger than in the milder climes.

Ever wonder how our small birds survive a cold night? How about a little Black-capped Chickadee who perches in a northern Minnesota woods all night at -30 F - maybe colder? They have a normal body temperature that is a little warmer than ours. It's 105° F (plus or minus). Some thrushes are nearly 110° F.

Maintaining a normal body temperature in very cold conditions would take a tremendous amount of energy. When they are sleeping, many birds experience a drop in body temperature, which requires much less energy to maintain. A condition called hypothermia exists when the body drops from a couple to about 12° C (about 22° F).
This means, down to around 83° F. The chickadees above and a number of others including hummingbirds can reduce their temperature even farther if need be. It is a state of profound hypothermia or torpor. Body temperature drops to as much as 57° F below normal. That's in the mid 40s and that's what happens on those minus 30° nights.

In the hypothermal state, the birds remain able to come out fairly quickly. A torpid bird, when waking and warming, will show fair muscular coordination at about 80 degrees but may require as much as an hour to return to a normal level of activity.

There is a winter acclimatization process that occurs as birds prepare for winter. Frank Gill gives the following account in his popular textbook *Ornithology*: "The acclimatization process goes on for weeks as, each day, the bird reduces the cost of thermoregulation. Winter-acclimatized American Goldfinches can sustain themselves for 6 to 8 hours when subjected to extremely cold temperatures of nearly -100 F. Summer-acclimatized goldfinches, however, cannot sustain themselves for more than one hour when subjected to such frigid temperatures. This ability of winter-acclimatized goldfinches to withstand cold stress is called thermogenic endurance."

Neat things - these birds.

MINUTES OF THE BOARD MEETING
April 3, 2001, 7:00 p.m.
Museum of Life Sciences at LSUS

Board members present at the meeting were Larry Raymond, Jeff Trahan, Lily Poole, Mac Hardy, Jim Ingold, Judy Townes, Hubert Hervey, and Rosemary Seidler.

Treasurer's report: Jean Trahan (treasurer) was not present so Jeff Trahan gave the treasurer's report. He reported that on March 31, the club had a cash balance of $2,257.88. Prepaid expenses for printing and postage were $161.49 and $109.55 respectively. The club's total assets are $2,528.92. The raffle earned $28.00 and Terry Davis' plant sale brought in $18.00.

Reports from Mac Hardy: a) Mac reported the spring and fall LOS meeting dates. He said that the Rockefeller NWR dormitory was reserved for the spring meeting and he will reserve it for the fall meeting. b) Mac also reminded the board that the American Birding Association has asked to advertise for *North American Birds* in our newsletter. He reported that there are regulations about bulk rate mailing and he will talk to the post office as to whether the proposed advertising will raise the rates. His research showed that if the proposed advertising is related to the objectives of the club, then it would probably not cause a rate increase. c) Mac reported that Jim Stewart has forty years of bird data available and he has agreed to allow the data to be placed into the database. d) Mac has hired Michelle Andrews to enter data into the database. e) Mac said that we have obtained official permission to place BSG pamphlets at the Tourist Center on I-20. He delivered them recently. f) Mac asked the board if the club should accept data sent to LABIRD or the phone tree. The group suggested that it not be done. g) Wildlife and Fisheries Day is September 22. Mac will not be able to attend. The club needs two to three people to man the booth. Jim volunteered to do this.

Field Trips: Jim Ingold reported that the NAMC is May 12. Larry cannot be there in the afternoon, so Mac said that he might host the dinner at his house after the count. Larry Raymond suggested that we might ask Dan Weber to lead a field trip to the Army Ammunition Plant. May 5 or 6 were suggested as possible dates.

Membership: Lily Poole reported that we have 96 paid and 68 gratis accounts. She also said that sending reminders about membership, by email, has been very useful.

Newsletter: Jim Ingold reported that the newsletter was recently sent to the printers and that it might not be mailed in time to arrive before the meeting. Jim will help Bill Wood take over as editor.

Programs: Larry Raymond said that Francine Forrester would speak at the June meeting. The topic will be birds of prey. Dave Patton will speak about hummingbird banding in May. Larry suggested that we obtain some type of item to give to our speakers as a token of appreciation. He suggested that we might think about pens with the BSG logo. He will look into this.

MINUTES OF THE REGULAR MEETING
April 10, 2001, 7:00 p.m.
Museum of Life Sciences at LSUS

Mac Hardy called the meeting to order at 7:00 p.m.

Larry Raymond introduced the speaker Dan Weber of The Nature Conservancy. Dan talked about The Nature Conservancy’s efforts to preserve habitats in Louisiana.

Mac Hardy reported that Jim Stewart has donated early bird records for inclusion in the bird database. The Rockefeller NWR dormitory is reserved for the LOS meeting, April 27, through April 29. The next field trip is next Saturday to Briarwood. Bill and Jane Hall will lead this trip. A field trip is tentatively scheduled on May 6, to the Army Ammunition Plant in Minden. Dan Weber would be the leader and would meet club members at 7:00 a.m. at the museum. The North American Migration Count is May 12. More specific information about the count will be given at the next meeting. The count dinner meeting will be at Mac’s house. John McBride is leading birding trips at Walter B. Jacobs Nature Park at 8:00 a.m. on April 14, 21, 28, May 5, and 12.

Committee reports: Jean Trahan gave the treasurer's report. She reported that on March 31, 2001, the club had a cash...
balance of $2,257.88. Prepaid expenses for printing and postage were $161.49 and $109.55 respectively, so the club’s total assets are $2,528.92. Hospitality chairperson, Judy Townes, thanked all of those club members who contribute food. Lily Poole reported 96 paid accounts and 165 active accounts. Jim Ingold said that the newsletter has been mailed late, but should be in mailboxes now. Mac Hardy reported only one copy of *Birding Hotspots* remaining. The American Birding Association may be interested in selling copies. He also said that there would be a board meeting on May 1 to discuss nomination of new board members. Rosemary Seidler asked for volunteers to fill positions on the board. Jim Ingold reported that the North American Ornithological Conference would meet in New Orleans, Louisiana. Jim will give an address at the meeting.

Bird talk: Louis Soule reported a **White-winged Dove** at his house. He even had a picture of the bird. Nancy Menasco reported 25 **Pectoral Sandpipers** and seven **Solitary Sandpipers** at Bickham Dickson Park. She also reported lots of **White Ibis**, nine **Black-crowned Night Herons** and her first **White-eyed Vireo** at Smithport Lake. Judy Townes saw a pair of **Yellow-crowned Night-Herons** in her neighborhood doing a courtship dance.

Bill Wood has two **Eastern Phoebes** nesting at his house. He also reported a **Broad-winged Hawk**, a **Lincoln’s Sparrow**, **Tree Swallows**, **Barn Swallows**, **Chimney Swifts**, and a **Ruby-throated Hummingbird**. Jim Ingold saw an **Orchard Oriole** at Clark’s Marina.

Bill Wood and Paul Dickson are developing a workshop on using radar to follow bird migration. The workshop will be offered if there is enough interest. Also, Richard Spark brought a visitor Philipp Feige, who is here on spring break.

**CORRECTION**

The **Neotropic Cormorant** reported in the last newsletter (1508) was an error.

**BIRD NOTES -- APRIL**

Compiled April 24, 2001

Report bird records for the Newsletter to Will Smolenski (865-2938) by the 15th of each month. Only records not printed since the last Newsletter are published.

Following each species is a line of data in the following format: date, initials of observer, number of birds observed; initials of another observer, number of birds observed, etc. For example: 01/12/99 PD 2 means that on 01/12/99 PD saw 2 birds. For the number of birds observed, a one is used both for one specimen and for numbers not reported by the observer. All bird records reported here are the responsibility of the observer. The Bird Study Group is reporting observations on the word of the observers.

<table>
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<tr>
<th>OBSERVERS</th>
<th>Abbreviation</th>
<th>Name</th>
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<tr>
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Pied-billed Grebe
Eared Grebe
American White Pelican
Double-crested Cormorant
Great Blue Heron
Least Sandpiper
Pectoral Sandpiper
Red-bellied Woodpecker
Ruby-throated Hummingbird
Chimney Swift
Great Horned Owl
Eastern Screech-Owl
Greater Roadrunner
Solitary Sandpiper
Lesser Yellowlegs
American Coot
Common Moorhen
Red-tailed Hawk
Red-shouldered Hawk
Sharp-shinned Hawk
Hooded Merganser
Norwich Shoveler
Green Heron
Downy Woodpecker
Common Name
Blond-crowned Night-Heron
Yellow-crowned Night-Heron
White Ibis
Common Moorhen
Common Coot
Common Gallinule
Common Snipe
Greater Yellowlegs
Lesser Yellowlegs
Ruddy Duck
Northern Harrier
Killer
Black-necked Stilt
Green-winged Teal
Mallard
American Wigeon
Ring-necked Duck
Leopard Duck
Ross' Goose
Snow Goose
Broad-winged Hawk
Red-tailed Hawk
Great Blue Heron
Anhinga
Double-crested Cormorant
Western Grebe
Western Grebe
California Grebe
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Printed 946 records of 129 species.