

HIGH COUNTRY HOOTS

High Country Audubon Society - Serving Alleghany, Ashe, Avery, Watauga, and Wilkes Counties

JOIN US FOR THE HCAS ANNUAL MEETING AND POTLUCK DINNER

The High Country Audubon Society's Annual Meeting is scheduled for Tuesday, July 27 at Lees-McRae College's Elk Valley Preserve.

The meeting begins with a 5:30 p.m. bird walk around the preserve to explore several habitats where birds abound.



All photos with this story by Monty Combs

Following the bird walk there will be a potluck dinner. Please bring a dish to share with the group! HCAS will supply the beverages.

In the spirit of conservation, we once again want to make this a "no waste event." Please bring your own plate, cup, silverware and napkin. This cuts down on paper waste and helps reduce the amount of material put in local landfills.



This year a silent auction will take place at the meeting. Bring along an auction item to donate and also some extra money to take home something really neat as well! The items you donate can be anything from books, clothes, artwork, field guides, birding gear, beverages, fresh fruit and vegetables, or anything to want to

donate that you think might interest members. This is a great opportunity and a fun way to raise funds for HCAS! This money will go toward the costs of hosting the 2011 North Carolina Audubon Annual Meeting. Bring an item or two and help us make this event a great success!

With your permission, some of the items may also be used as door prizes.

Books will be on sale at the meeting as well this year. As part of a new fundraising effort, HCAS will be selling books at monthly meetings as well as at local venues throughout the year. There are a wide variety of nature related books to choose from, over 100 titles!

Back by popular demand this year will be the "Year in Review" slideshow.

"Our chapter has been really busy this year," said HCAS President Jesse

Continued on Page 2

Directions to Field Station

- Coming from Tynecastle, turn left at Banner Elk stoplight on to 194 South

- Travel for 3 miles and turn left on Puckett Rd. If you go past Elk Valley Baptist Church or Eagles Nest you have gone too far.

- Travel for .2 miles. After you cross a one-lane bridge, immediately take a left onto a gravel driveway.

Continue through the gates to the cedar-sided, green-roofed field station.

July/August - 2010

Volume 2, Issue 3

CALENDAR OF EVENTS

July

24	Shady Valley Field Trip	All Day
27	Annual Chapter Meeting	5:30 p.m.

August

17	Monthly Meeting at Watauga County Ag. Conference Center	6:30 p.m.
21	Mount Jefferson State Natural Area Field Trip	TBD

September

14	Monthly Meeting at Watauga County Ag. Conference Center	6:30 p.m.
25	Hawk Watching Field Trip to Mahogany Rock	All Day

A \$5 donation is requested with field trip attendance.

All events and meeting times are subject to change.

For updated information please visit

<http://highcountryaudubon.org>.

FUN FACTS

Blue Grosbeak



- A beautiful blue bird with silvery bill and chestnut wingbars, the Blue Grosbeak is an uncommon bird of shrubby habitats across the southern United States.
- The Blue Grosbeak formerly was placed in its own genus, *Guiraca*. Similarities with buntings in genetics, behavior, molts, and plumages led to its inclusion in the bunting genus *Passerina*. Genetic evidence indicates that the Lazuli Bunting is its closest relative.
- In the southern part of its breeding range, the bird commonly raises two broods per year.
- Habitat: Forest edge, fields, power-line cuts, riparian areas, hedgerows, and other areas with medium-sized trees and low shrub density.
- Nest Description: Compact cup made of twigs, bark, rootlets, and other fibers and strips of material, placed low in shrubs or small trees.
- The bird's large bill can handle large seeds, including corn, and insects such as mantids and grasshoppers.

Info and picture found on <http://www.birds.cornell.edu>.

ANNUAL MEETING CONT.



Pope. "I think everyone will enjoy seeing what all we've been up to."

After all the fun, there will be some business to take care of as well. The group needs to elect two new officers for the Executive Board, President and Secretary. There are a

few nominations at this point, but they will also be taken from the floor at the meeting. Members will also be provided with the chapter's end of the year financial statement and annual activities review at the meeting.

We hope to see everyone July 27th for some fun birding, great food and exciting times!

SHADY VALLEY BIRDING

Join us for the July 24 field trip to Shady Valley, Tennessee! The hike will be led by Merrill Lynch from The Nature Conservancy. This area is a great location for many species of birds, including some mountain rarities.

"Merrill is an incredible naturalist and has a lot of knowledge about the Appalachians," said HCAS President Jesse Pope. "Getting a chance to get out in the field with him is a wonderful opportunity."

Lynch is Conservation Practitioner for the Northern Mountains office of The Nature Conservancy (TNC). He's a lifelong birder and naturalist and has worked for TNC for almost 26 years. His years of experience in the field have afforded him some wonderful opportunities.



Willow Flycatcher

"I've traveled around the world in pursuit of birds and have seen over 3,600 species, which is over a third of the total number of species in the world," said Lynch.

The group will travel to Shady Valley July 24. The Shady Valley Preserve is owned and managed by the Tennessee chapter of TNC and is located on US 421 about 10 miles northwest of Mountain, City, TN.



Savannah Sparrow

The preserve includes several relic cranberry bogs and is the site of a major bog wetland restoration program.



Virginia Rail

Photos from www.birds.cornell.edu

"We will see native cranberries and a host of other wetland plant species at the site," said Lynch.

Interesting birds here include breeding Willow Flycatchers, Savannah Sparrows and Virginia Rails. The site is also very good for those interested in odonates and leps.

Those interested in attending should watch the listserv for information about times and carpooling. The group will most likely meet in Boone and then travel together to the junction of US 421 and TN 133 to meet Lynch. There is a convenience store at this junction. Please join the HCAS for this great summer birding opportunity!

High Country Audubon Society Board

Jesse Pope - President, Field Trips & Social Events Chair

Anita Clemmer - Vice President

Janet Palmer - Secretary

Doris Ratchford - Treasurer

Bob Cherry - Conservation & Education Chair

Bettie Bond

Martha Cutler

Donald Mullaney

Mary Carol Ochipa

Rosalind Pevsner

Stewart Skeate

Sue Wells

High Country Hoots is published six times a year by the High Country Audubon Society, a chapter of National Audubon. Local members receive the newsletter via electronic mail. It is also archived on <http://groups.yahoo.com/group/highcountryaudubon>.

HCAS Happenings

Weekday Birding

- Tuesday, July 13 @ 8 a.m. - Meat Camp Birding

If the weather is bad, check with Martha Cutler by 7:30 a.m. that morning to see if the trip is rescheduled. A possible rain date is the Thursday, July 15.

If you are interested in attending please contact Martha Cutler at cutford@skybest.com.

Wednesday Morning Bird Walks

- Bird walks are led every Wednesday morning from 8:30 a.m. to 10:30 a.m. by Curtis Smalling at Valle Crucis Community Park.



**High Country
Audubon Society**

PO Box 3746
Boone, NC 28607

<http://highcountryaudubon.org>

E-mail: highcountrybirder@yahoo.com

AUGUST EVENT DETAILS

August Monthly Meeting

Tuesday, August 17 at 6:30 p.m.

Watauga County Agricultural Conference Center

Bill Ehlig will be giving a presentation about the relationship between Horseshoe crabs and Red Knots. Bill spends half of the year near Charleston, SC and has personally experienced the spectacle of Horseshoe crabs coming ashore for courtship and mating. During the presentation, Bill will show the film "Expeditions with Patrick McMillan - Port Royal Sound - A Hotspot of Coastal Diversity."

Mount Jefferson State Natural Area Field Trip

Saturday, August 21

Escape the heat and do some high-elevation birding! This half-day field trip will take place in the morning and end with a picnic. Please bring a bag lunch with you. The mountain, located in Ashe County, rises to more than 1,600 feet above the surrounding landscape and provides a bird's-eye view of both Jefferson and West Jefferson.

Is there a program topic you would like to hear about?

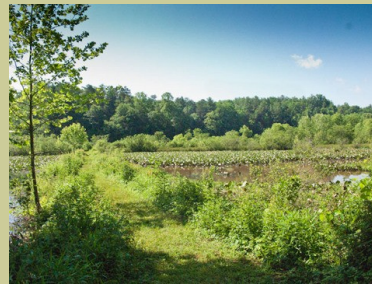
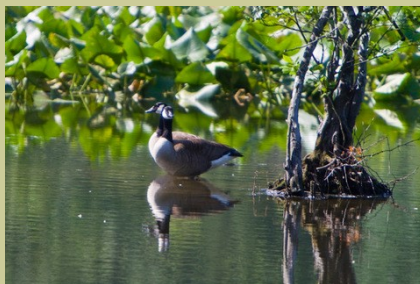
Let us know!



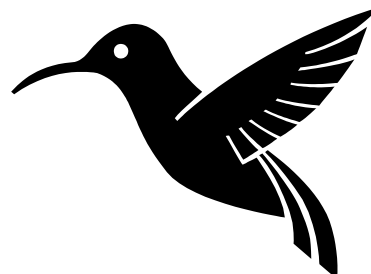
HCAS Member Photo Gallery

Field trip to Wagner Property—May 2010

Photos by Monty and Brenda Combs



High Country Hoots is here to meet your needs! Many requests have been placed recently for scientific journal entries concerning all things avian. The following five pages contain the scientific document, *Addressing Hummingbird Conservation Needs: An Initial Assessment* by Susan M. Wethington and Nash Finley.



MEMBERSHIP INFORMATION

An annual membership to the High Country Audubon Society is \$10 per person and due June 1 of each year. Membership and support gives you access to the group's listserv and the HCAS e-newsletter *High Country Hoots*. Mail check and information (name, address, telephone number, e-mail) to:

High Country Audubon Society

Attention: Membership Dues

PO Box 3746

Boone, NC 28607

ADDRESSING HUMMINGBIRD CONSERVATION NEEDS: AN INITIAL ASSESSMENT

SUSAN M. WETHINGTON^{1,3} AND NASH FINLEY²

¹Hummingbird Monitoring Network, P.O. Box 115, Patagonia, Arizona 85624, USA; and

²Patagonia Union High School, Patagonia, Arizona 85624, USA

Abstract. Despite their diversity and extreme popularity with humans, hummingbirds have received relatively little attention from a conservation standpoint. The Hummingbird Monitoring Network (HMN) was started in 2002 to address the conservation needs of this family of birds. In this initial assessment of the conservation needs for the most threatened hummingbird species, we built a composite map of all their ranges and summarized their attributes. Forty-eight species (over 14% of the family) are vulnerable, threatened, or endangered. They live at all elevations, from sea-level to 4800 m. Most rely on forests, are range-restricted, and do not use man-made habitats, such as gardens and agricultural areas. The primary habitats with the highest number of at risk species are montane evergreen forests (18 species), tropical lowland evergreen forests (8 species), and elfin forests (6 species). Based upon the number of vulnerable, threatened, and endangered hummingbird species, the Tropical Andes and southern Mexico appear to be areas with the highest threats. This vulnerability assessment for the family of hummingbirds provides information that can help focus conservation attention in areas and habitats where the most threatened hummingbird species live.

Key Words: altitudinal migrants, assessment, conservation needs, forests, hummingbirds, range-restricted, Trochilidae.

ABORDANDO LAS NECESIDADES DE CONSERVACIÓN DEL COLIBRÍ: UNA EVALUACIÓN INICIAL

Resumen. Pese a su diversidad y su extrema popularidad entre los seres humanos, desde la perspectiva conservacionista los colibríes han recibido relativamente poca atención. La Red de Monitoreo del Colibrí -Hummingbird Monitoring Network (HMN)- se inició en el 2002 para abordar las necesidades de conservación de esta familia de aves. En esta primera evaluación de las necesidades de conservación de las especies de colibríes más amenazadas, hemos elaborado un mapa compuesto de todos sus rangos de distribución y resumido sus atributos. Cuarenta y ocho especies (más del 14% de la familia) son hoy vulnerables, amenazadas o están en peligro de extinción. Viven en toda clase de altura, desde el nivel del mar hasta los 4800 m. La mayoría depende de los bosques, están restringidos a un área y no utilizan hábitats creados por el hombre, tales como jardines y zonas agrícolas. Los hábitats primarios con el mayor número de especies en riesgo, son los bosques siempreverdes de montaña (18 especies), los bosques siempreverdes tropicales de tierras bajas (8 especies) y los bosques enanos (6 especies). Basándonos en el número de especies de colibríes vulnerables, amenazados y en peligro, los Andes Tropicales y el sur de México, parecen ser las zonas de mayores amenazas. Esta evaluación de vulnerabilidad de la familia de los colibríes, proporciona información que puede ayudar a concentrar la atención sobre su conservación en zonas y hábitats donde viven las especies de colibríes más amenazadas.

INTRODUCTION

The hummingbird family (*Trochilidae*) occurs only in the Americas, where they are the second most diverse family of birds with at least 335 species (Schuchmann 1999). Forests are the primary habitat for over 80% of these species (Stolz et al. 1996). They are specialized nectar feeders that present morphological,

ecological and physiological adaptations for this diet and serve as pollinators for a wide array of native plants (Grant and Grant 1968, Stiles 1981, Brown and Bowers 1985, Rosero 2003, Temeles and Kress 2003, Gegeer and Burns 2007). Their distribution shows a strong latitudinal gradient, with the highest numbers of species occurring in the tropics (Greenewalt 1960).

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In 1999, 25 hummingbird species were listed as threatened or endangered (Schuchmann 1999). As of the date of this paper, 48 species (over 14% of the family) were considered vulnerable to extinction (Birdlife International 2008). In Mexico, 23 of the 57 species are included in Mexican Law as threatened (NOM-ECOL-059-2001), 12 as endangered, and 11 as protected.

Seventeen species regularly occur in the US and Canada, of which thirteen species are Neotropical migrants that over-winter in Mexico (US Fish and Wildlife Service 2008). Partners in Flight (PIF) has identified three of the latter as Watch List Species—Costa's (*Calypte costae*), Calliope (*Stellula calliope*), and Rufous (*Selasphorus rufus*)—and a fourth—Lucifer (*Calothorax lucifer*)—as a Stewardship Species (Rich et al. 2004). The Rufous Hummingbird is also on the Audubon Watchlist as a "Species in Decline," with an estimated 2.7% population decline per year from 1966 to the present (National Audubon 2008).

Due to their small size, rapid movement, high-pitched vocalizations, unique flight abilities and other factors, techniques used to monitor other landbirds fail to monitor hummingbird populations adequately. Long-term population trend data is considered adequate for only 4 of the 16 species that regularly breed in the US and Canada (Rich et al. 2004). Trend data for other hummingbird species in the Western Hemisphere is insufficient or non-existent.

After the PIF conference in Asilomar, CA in 2002, the Hummingbird Monitoring Network was started to address this need in avian monitoring and conservation. The HMN now maintains over 30 study sites in Canada and the U.S. and is expanding into Mexico. It is a science-based, project-driven, nonprofit organization dedicated to the conservation of hummingbird diversity and abundance throughout the Americas. To begin assessing the conservation needs for this family, we summarize information about the distribution, habitat, and ecology of the most threatened species.

METHODS

We obtained a list of threatened and endangered hummingbird species from Birdlife International (2008), and extracted pertinent information (Table 1) from Schuchmann (1999) and Stolz et al. (1996) to determine where and what the highest threats are. We created a composite range map for these species to identify areas of range overlap. We then used occurrence, habitat, and nesting information to identify which characteristics were shared among these species at risk.

RESULTS

Table 1 summarizes the characteristics of at risk species. Forty-eight (over 14% of the family) are vulnerable, threatened or endangered and most (45 species) are range restricted. They live at a variety of elevations ranging from sea level to 4800 m and all elevation ranges have about the same number of at risk species. Over half of these species occur across a large range of elevations (>800 m) and are altitudinal migrants.

Over 70% at risk hummingbird species use forests as their primary habitat. Montane Evergreen Forests have the highest number (18) with more than twice as many at risk species than the next primary habitat, lowland tropical evergreen forests (8) and three times more species than the third primary habitat, Elfin Forests (6). Montane Evergreen Forests and lowland tropical evergreen forests that have at risk species occur in numerous locations throughout Latin America but the third highest at risk habitat, the Elfin Forest, is limited to the Andes (Table 2). Based upon the number of species at risk, the Tropical Andes and southern Mexico appear to be the areas with the highest threats (Fig. 1). The most cited threats for these at risk species is habitat destruction or land use change.

Perhaps, the most surprising results are that over 70% of these at risk species do not use man-made habitats such as gardens and agricultural fields and little is known about the natural history. For example, nests are un-described for more than 60% of these species.

DISCUSSION

This investigation is HMN's initial effort to assess the conservation needs for the most threatened members in the hummingbird family. Their conservation depends largely on the conservation of forests, where most hummingbird species live. Their tropical diversity is highest in montane/sub-montane moist forests (Schuchmann 1999) and this pattern of diversity continues northward where the highest diversity of hummingbirds in the U.S.A. occurs in southeastern Arizona in the pine/oak woodlands (Wethington et al. 2005), forests included in the montane evergreen forest classification (Stolz et al. 1996). This forest classification has the highest number of at risk hummingbird species followed by lowland tropical evergreen forests and elfin forests.

Habitat destruction and land use changes are cited as the highest threats followed by the result that most of these at risk species are range-restricted. Small ranges and lack of basic

TABLE 1. SUMMARY OF CHARACTERISTICS FOR AT-RISK HUMMINGBIRD SPECIES. BIRDLIFE STATUS CATEGORIES ARE: CR = CRITICALLY ENDANGERED, EN = ENDANGERED, NT = NEAR-THREATENED, VU = VULNERABLE. SPECIES INFORMATION WERE OBTAINED FROM (1) THE HUMMINGBIRD SECTION IN THE HANDBOOK OF THE BIRDS OF THE WORLD (SCHUCHMANN 1999) AND (2) THE ZOOGEOGRAPHICAL AND ECOLOGICAL DATABASE FROM NETROPICAL BIRDS: ECOLOGY AND CONSERVATION (SOTILZ ET AL. 1996).

Species Information	Risk Categories				Total
	CR	EN	NT	VU	
Total number of species	9	14	19	6	48
Range-restricted species ¹	7	14	18	6	45
Uses man-made habitats such as gardens and agricultural fields ¹	2	4	6	1	13
Nest undescribed ¹	7	10	8	6	31
Primary Habitat Type ²					
Unknown		1			1
Tropical Lowland evergreen forest	1	2	5		8
Mangrove	1	1			2
Secondary Forests			1		1
Montane Evergreen Forests	4	3	6	5	18
Elfin Forest	1	3	2		6
Tropical Deciduous Forest	1				1
Arid lowland Scrub			1		1
Riparian Thickets		1			1
Second-growth Scub			1	1	2
Arid Montane Scrub		1	3		4
Semi humid / humid montane scrub	1	2			3
Altitudinal Range ^{1,2}					
Low (<400 and <1200 m)	3	4	6	1	14
Mid (>400 and <2400 m)	2	3	8	4	17
High (<1200 and >2300 m)	4	7	5	1	17
Altitudinal Breadth ^{1,2}					
Narrow (<801 m)	3	8	7		18
Moderate (>800 m and <1601 m)	2	4	11	4	21
Wide (>1600 m)	2	2		2	6
Unknown	2		1		3
Primary Threat Categories ¹					
Habitat loss or change	7	5	10	3	25
Human use such as farming, mining	1	2	2	1	6
Species characteristics such as range-restricted or rare	1	7	7	2	17

TABLE 2. SUMMARIZES THE REGIONS WHERE THE PRIMARY HABITAT FOR AT-RISK HUMMINGBIRD SPECIES OCCUR. DATA FROM THE ZOOGEOGRAPHICAL AND ECOLOGICAL DATABASE FROM NETROPICAL BIRDS: ECOLOGY AND CONSERVATION (SOTILZ ET AL. 1996).

Primary habitat	Cuba	Mexico	Central America	Tropical Andes	Chile	Venezuela	Brazil	TOTAL
Unknown						1		1
Tropical Lowland evergreen forest		1		4			3	8
Mangrove			1	1				2
Secondary Forests				1				1
Montane Evergreen Forests		4	1	11		2		18
Elfin Forest				5		1		6
Tropical Deciduous Forest			1					1
Arid lowland Scrub		1						1
Riparian Thickets				1				1
Second-growth Scub	1		1					2
Arid Montane Scrub				2			2	4
Semihumid/humid montane scrub				2	1			3
TOTAL	1	6	4	27	1	4	5	48

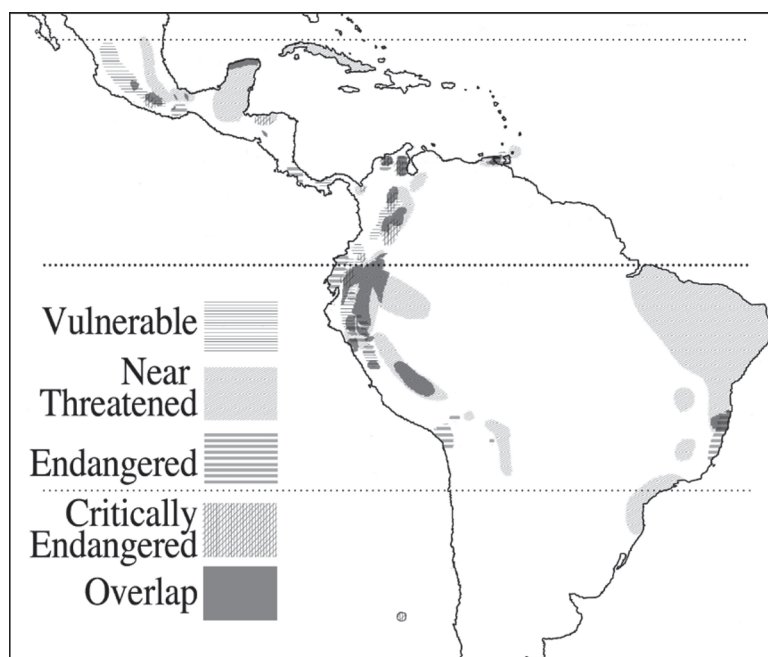


FIGURE 1. This map portrays the ranges of all hummingbird species at risk based upon Birdlife International's risk categories (2008). Areas where ranges overlap are shown in black.

life history information make addressing their conservation needs particularly challenging. This vulnerability assessment for the family of hummingbirds provides information that can help focus conservation attention in areas and habitats that are most critical for maintaining hummingbird diversity in the Americas.

ACKNOWLEDGMENTS

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