



PRIMARY SOURCE



Photo by Ross Lock

A bird in the bush is worth a good deal to Black Hills area

By Nancy Drilling

RMBO South Dakota Projects Coordinator

Rocky Mountain Bird Observatory field technician Eric Ripma was working in the Black Hills of South Dakota last summer when he emailed me to report a bird he couldn't believe he had seen until he "finally got a good look."

"It's an Orange-billed Nightingale-Thrush," he wrote.

Was it hard to believe that a Mexican species never seen north of Texas was singing in the Black Hills of South Dakota? Indeed. As coordinator of the state's Breeding Bird Atlas project and a regular contributor to SD-birds online discussion group, I hesitated to write a post about this highly unusual sighting.

Instead, I contacted local Black Hills birders, including RMBO atlas technician Jennifer Fowler, who immediately went to where Eric had been. Jen found the thrush singing away in the picturesque canyon. She posted verification of the sighting online, and the birder stampede was on!

When I got there at 6 a.m. the next day, 14 birders from five states were looking at the rare songster. By the time the thrush disappeared 33 days later, an estimated 400 people from all over the country had travelled to South Dakota to see it.

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International journal publishes RMBO Mountain Plover research

The respected *Journal of Applied Ecology* of the British Ecological Society has published a study on Mountain Plover prepared by collaborators from the University of Nebraska – Lincoln and Rocky Mountain Bird Observatory.

"Being published in this journal speaks well for the rigor and importance of the work we're doing," says Tammy VerCauteren, executive director of RMBO and the study's co-author along with UN-L's Max Post van der Burg and Andrew Tyre and former RMBO biologist Bart Bly.

Its web site says the journal's "recognised prestige with a large circulation to researchers, environmental managers, students and libraries" stems from its influence on ecological management, high quality standards and international coverage.

The study is based on surveys conducted by RMBO in Nebraska's southwest panhandle in the summers of 2005 through 2007 – the first thorough exploration of Mountain Plover ecology in that state.

One of the most intriguing results, ac-

ording to Bly, was the study's estimate of a relatively stable population of 1,500 adult Mountain Plover in Nebraska, which is substantially higher than earlier estimates. This could reflect better detection by surveyors and/or conservation work performed by RMBO and Nebraska Game and Parks Commission. Significant strides have also been made in landowner education and local awareness related to this at-risk species.

This study also suggests that not all locations across a landscape have the same conservation value for Mountain Plover and that precious conservation resources should focus on the areas of high conservation value.

"Making better sense of monitoring data from low density species using a spatially explicit modeling approach," was published online on Nov. 30 and will appear in an upcoming print edition of the journal. The abstract can be read at: onlinelibrary.wiley.com/doi/10.1111/j.1365-2664.2010.01900.x/abstract.

**Rocky Mountain
Bird Observatory
events, activities and
volunteer opportunities!
Page 3**

2011: Full Steam Ahead!

By Tammy VerCauteren, Executive Director

If the number of activities spilling off of page three is any indication, 2011 is shaping up to be an action-packed, productive year for Rocky Mountain Bird Observatory. Other recent developments reinforce that prediction.

RMBO received one of four Colorado Kids Outdoors grants in December. This gives a boost to our environmental education and bird monitoring programs by funding six summer interns who will help run camps, develop curriculum and conduct bird point-counts. This is especially timely, with the continuing improvements at the Environmental Learning Center at the Old Stone House. The interns will increase the staff's capacity to host hundreds of school kids and will help with "On the Wing," our week-long camp for 13-15 year-olds.

Our international team is "down south" at this moment conducting winter grassland-bird monitoring surveys in the Chihuahuan Desert grasslands in the U.S. and Mexico (see pages 4 and 5). The Sky Islands region in the southwestern U.S.

has been a significant hole in our survey coverage, but thanks to a grant from the National Fish and Wildlife Foundation, we are expanding our efforts to Arizona and New Mexico this year. For the first time there will be a complete picture of wintering grassland bird species' populations across the threatened Chihuahuan Desert grassland ecosystem. Those data will help determine how birds are responding to site-specific management and to broader environmental conditions.

In the arena of statistical rigor, study design and publishing results, our collaborative paper with the University of Nebraska-Lincoln (see page 1) was accepted by the highly regarded *Journal of Applied Ecology*. The modeling effort the paper outlines provides a framework to study spatial variation that can be used to better target management actions.



Tammy and husband Kurt enjoy the rushing Cache La Poudre River in Colorado.

With all this and more on our plate, we anticipate 15 percent growth in our grant and contract funding in 2011. We also hope RMBO membership and donations continue to grow, which helps us tackle additional high-priority work.

That brings me back to all those activities on the calendar and to predictions. I encourage you to join us at these events — and bring a friend along. I predict you will enjoy yourself — and RMBO may get a new recruit!

Much is new at the Old Stone House

With more than a little help from friends, the new Environmental Learning Center at RMBO's Old Stone House near Brighton, Colo., is coming to life.

Our grant from Adams County Open Space was finalized last summer, marking the start of making the vision a reality. First, Barr Lake State Park built a new parking lot that will serve the new north entrance to the park and the learning center. It will feature a self-serve kiosk where visitors can buy daily park permits.

In November our partners, Wildlife Restoration Volunteers, hired Mile High Youth Corps to build our new Welcome/Prairie Trail from the parking lot to the Old Stone House. Our volunteer naturalists also lent a hand.


In December, 45 volunteers from Vestas Nacelles America, Inc., removed non-native plants and old fencing, painted our new shed and put finishing touches on the trail.

With friends like these, RMBO's Environmental Learning Center will be in full swing right on schedule.



Forty-five employees from Vestas Nacelles America, Inc., volunteered to tackle several projects, moving RMBO's new Environmental Learning Center closer to its completion next year.

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The Primary Source logo with a baby Killdeer and a primary feather from a pelican was designed by Granby, Colo., artist David Utterback. Primary feathers give power to a bird's flight. Our members, friends, volunteers and partners are the primary source of RMBO's power to accomplish its mission to conserve birds and their habitat.

Editing and design: Victoria Collier

Volunteering with Rocky Mountain Bird Observatory

Explore opportunities at annual open house

If you enjoy watching birds, are curious about raptors, or want to help others learn about birds and the environment, you should consider becoming a volunteer for Rocky Mountain Bird Observatory.

The annual Volunteer Open House on January 20 is a good place to find out about RMBO's citizen science, summer camps, school programs and other volunteer opportunities in Colorado.

The event is 4 to 6 p.m., with a presentation at 4:30, at RMBO's Old Stone House at 14500 Lark Bunting Lane, Brighton, Colo.

RSVP by January 19 to Abby Churchill at abby.churchill@rmbo.org or 303-659-4348 ext. 11.

Family Corner Winter Activity:

Bird Buffet on a String

Winter can make it tough for birds to find foods like insects and seeds. Cold temperatures or snow can make bird feeders busy places. To make this feeder



Bohemian Waxwing
by Bill Schmoker

on a string, here are the things you need:

- Dental floss or crochet thread (make your "buffet" any length you wish)
- Large needle
- Fresh and dried fruit (apples, oranges, grapes, cranberries, berries, raisins ...)
- Peanuts in the shell (unsalted)

1. Loop the floss/thread through the needle, and pull it through to make a double strand so the feeder is stronger.
2. Tie a knot at the end.
3. String the fruit and peanuts in any pattern you like. Leave about two inches of thread/floss to tie a knot on this end.
4. Hang your feeder. Find a place close to cover like a bush or tree so birds will feel safe and have a perch where they can survey their surroundings.



RMBO volunteer naturalist Amber Tyler engages youths in an outdoor activity.

"Volunteering with RMBO is a great opportunity to learn and be part of preserving birds and their habitat and then pass this knowledge on ... for a future generation."

Dale Jones, RMBO Volunteer

Wanted: volunteer naturalists to lead learning activities

Rocky Mountain Bird Observatory's Naturalist Program is seeking volunteers in the Denver Metro area. Those with an interest in environmental education who enjoy working outdoors with people of all ages are good candidates to join this team.

Once accepted into the program, volunteers receive about 40 hours of classroom and field training in basic ecology and ornithology, teaching techniques, public speaking and more.

Volunteer naturalists are a key part of RMBO's education programs, which promote a conservation ethic through interactive learning. Naturalists lead in-class programs, field trips and educational outreach events.

To apply or for more information, contact Abby Churchill at 303-659-4348 ext. 11 or abby.churchill@rmbo.org.

RMBO Events & Activities, January - April

Unless otherwise noted, events & activities are at RMBO's Old Stone House & Environmental Learning Center, 14500 Lark Bunting Ln., Brighton, Colo.
(northeast of Denver on I-76; east on Bromley Lane; first right after train tracks)

January

- 20: Volunteer Open House, 4-6 p.m. See story and details on this page.
- 22: Bald Eagle Watch training, 10 a.m. For info or to register contact Cindi at cindi.bew@rmbo.org or 303-659-4348 ext. 13.
- 29: Summer camp informational meeting (with pizza!), 11 a.m. Learn about and share ideas for RMBO's "On the Wing" summer camp in Winter Park for ages 13-15, including the camp itinerary and scholarship opportunities. RSVP to cassy.bohnet@rmbo.org or 303-659-4348 ext 15.
- 29: RMBO booth at Bath Garden Center Bird Day 2011, 2000 E. Prospect, Fort Collins, Colo., 10 a.m. - 4 p.m.
- 29: Field Sketching and Nature Journal basics with artist Sherrie York, 9 a.m. - noon. \$40. RSVP to cassy.bohnet@rmbo.org or 303-659-4348 ext 15 by Jan. 21.
- 30: Getting Started with Handmade Books with artist Sherrie York, 9 a.m. - noon. \$50 includes materials. RSVP to cassy.bohnet@rmbo.org or 303-659-4348 ext 15 by Jan. 21.

February

- 2: Feathers and Talons: Ecology of Colorado Birds of Prey, presentation by RMBO biologist Jeff Birek at Chautauqua Community House in Boulder, Colo., 7 p.m. \$10 per person (\$7 with member code: rmbo). Advance tickets at chautauqua.frontgatetickets.com.
- 12: Winter Raptors on the Prairie, field trip to Pawnee National Grasslands for intro to raptor identification and watching with RMBO biologists, 8 a.m. - 1 p.m. \$20 per person includes transportation from Ft. Collins, Colo. RSVP by Feb. 9 at 303-659-4348 ext. 11 or abby.churchill@rmbo.org.
- 15: Beyond the Red-tailed Hawk: Intro to the Identification of Colorado Birds of Prey, presentation by RMBO biologist Jeff Birek at Chautauqua Community House in Boulder, Colo., 7 p.m. \$10 per person (\$7 with member code: rmbo). Advance tickets at chautauqua.frontgatetickets.com.

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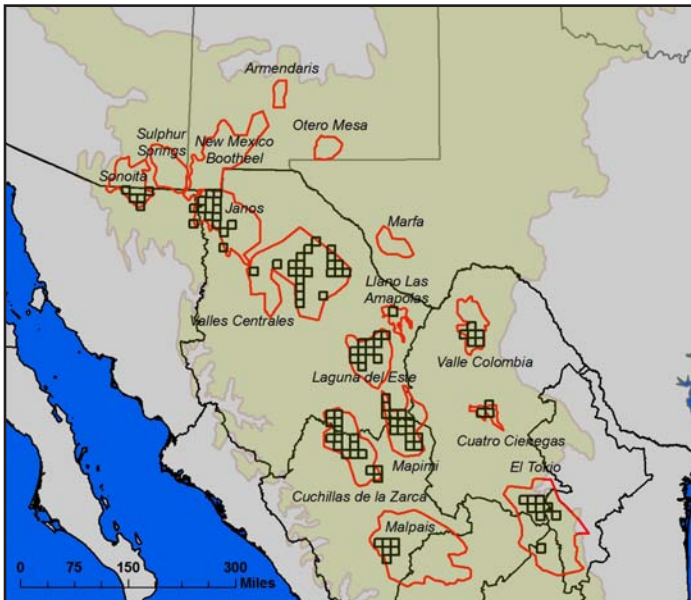


Grasslands in Jeopardy:

Biologists race to conserve birds in a disappearing habitat

The most serious grassland habitat degradation is due to conversion to irrigated crops as shown above near Janos, Chihuahua, Mexico.

Story, map & photos by Greg Levandoski, Rocky Mountain Bird Observatory Chihuahuan Desert Project Manager
Chestnut-collared Longspur photo by Bill Schmoker



Chihuahuan Desert Grassland Priority Conservation Areas (red) and RMBO's 2010 grassland bird survey blocks (black). RMBO will survey those blocks again in 2011, along with 19 additional blocks in Mexico and 68 blocks in the U.S. GPCAs. These surveys will fill critical information gaps for developing effective conservation strategies.



Fence lines clearly illustrate how different grazing strategies affect grassland conditions. Poorly managed grasslands can turn into desert scrub, reducing bird habitat and the productivity of cattle ranching. Low economic returns from traditional ranching make the land more likely to be sold or rented for crop production, which is usually not sustainable due to limited ground water. When the grasslands and water are gone, the land will support few birds – or humans.

RMBO's International Director Arvind Panjabi and Universidad Juárez de Durango Ph.D. candidate José Hugo Martínez Guerrero inspect healthy grassland in the state of Durango, Mexico.



Grasslands are the most threatened ecosystem on the planet, so it is not surprising that grassland birds are the most threatened group of birds in North America. Little is known about North American grassland birds in winter, including what habitats they require, where those habitats are located, and how populations are distributed across the landscape.

For a fifth winter season, Rocky Mountain Bird Observatory's International Program has staff in the field in Mexico collecting population data on grassland birds of concern. And this year RMBO biologists have added the desert grasslands of southeastern Arizona and southern New Mexico to the study with the help of a new grant from the National Fish and Wildlife Foundation. The grasslands of western Texas will be included for a third consecutive year, thanks to funding from Texas Parks and Wildlife Department.

For the first time ever, bird conservationists will have a complete picture of wintering grassland bird species' distribution and abundance across the threatened Chihuahuan Desert grassland ecosystem. These studies provide the scientific foundation for agencies and organizations to develop a strategic plan for habitat conservation. Additional funding for this work comes from: U.S. Fish and Wildlife Service, U.S. Forest Service International Program, the Commission for Environmental Cooperation, and The Nature Conservancy.

Grassland Priority Conservation Areas in Mexico and the southwestern U.S. are the focal points for conserving healthy desert grassland ecosystems, including migratory birds and other species that do not adhere to state or national boundaries.



Grassland birds like this Chestnut-collared Longspur are declining throughout their ranges.



Field technicians at the Reserva Ecológica El Uno, a 45,000-acre grassland preserve and research facility owned by The Nature Conservancy in Janos, Chihuahua. TNC donates use of the facility for RMBO to house field crews and train technicians in grassland bird identification and scientific bird and habitat sampling protocols.



Events & Activities

February, continued from page 3

- 22: HawkWatch volunteers in-class training at Dinosaur Ridge, Morrison, Colo., 5:30 – 7 p.m. For information contact 303-659-4348 ext. 11 or abby.churchill@rmbo.org.
- 26: HawkWatch volunteers field training at Dinosaur Ridge, Morrison, Colo., 10 a.m. – 2 p.m. For information, contact 303-659-4348 ext. 11 or abby.churchill@rmbo.org.

March

- 14: Students in Service: Count Your Birds. Kids will learn to identify 10 common birds and put those skills to use conducting three surveys outside, 1-3 p.m. \$5 per student. Register at cassy.bohnet@rmbo.org or 303-659-4348 ext 15 by March 13.
- 20: Design a Walking Stick. Families will create unique walking sticks to use on their summer hikes, 1 – 3 p.m. \$20 per family includes supplies. Register at cassy.bohnet@rmbo.org or 303-659-4348 ext 15 by March 13.

April

- 11: Barr Lake Bird Watch. A hike to learn about the birds at Barr Lake State Park where about 350 species are seen each spring, 10 a.m. – noon. \$5 per student. Register at cassy.bohnet@rmbo.org or 303-659-4348 ext 15 by April 8.
- 23: Kite Making. All ages love to fly kites! Create your own kite, then enjoy watching birds while you fly it, 3 – 5 p.m. \$15 per family includes materials. Register at cassy.bohnet@rmbo.org or 303-659-4348 ext 15 by March 13.

May

- 21: Save the date! Celebrate International Migratory Bird Day 2011 by joining our walkathon for conservation! Watch for details in our next newsletter and at rmbo.org.



Kids have fun and learn skills like bird identification at RMBO workshops and outings.

Black Hills knows worth of a bird in the bush

continued from page 1

Though these visitors spent money on food, lodging, travel and other expenses, little information exists on the economic impact of birding. To gather data about the Orange-billed Nightingale-Thrush's contribution to the local economy, RMBO surveyed some of the people who went to see, or attempt to see, the bird.

Responses from 159 visitors from 23 states revealed that they all could be considered avid birders, nearly all made the trip exclusively to see this bird, and together they spent more than \$36,000. All reported having a positive trip, even if they didn't see the elusive thrush, and many plan to return to do more birding in the Black Hills.

Once the survey results are compiled, RMBO will share them with area businesses, tourist agencies and land managers to illuminate birding's benefits to the local economy. We also may use the results to develop special birding programs in the Black Hills. The completed survey report will be posted at rmbo.org.



An Orange-billed Nightingale Thrush made a surprise visit to South Dakota last summer.

Photo by Doug Backlund

RMBO plays major role in assessing North American bird conservation

Reading *The 110th Christmas Bird Count* issue of *American Birds*, RMBO Board Member Chuck Hundertmark was reminded that this small organization successfully carries a big load.

In "Citizen Scientists Make a Difference," Audubon Vice-President and Chief Scientist G. Thomas Bancroft touts the importance of Christmas Bird Counts and Breeding Bird Survey data for understanding long-term bird population trends and describes how the WatchList of birds at risk is developed:

"Every four to six years, Audubon works with scientists from Cornell Laboratory of Ornithology, American Bird Conservancy, Rocky Mountain Bird Observatory, and U.S. Geological Survey to evaluate birds to determine which species are of serious conservation concern."

"RMBO is right there with the big players as a leading avian research organization and an important regional, national and international force for bird conservation," Hundertmark said.

In addition to working with larger groups to collect and evaluate data and score the level of conservation concern for bird species, RMBO maintains this information in the Partners in Flight (PIF) Species Assessment Database and makes it available online.

With information on nearly 1,200 species from Canada, the U.S. and Mexico, the PIF database is the foundation for coordinated landbird conservation in North America.



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People & Nature
Together™

Wild Birds Unlimited

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2720 S. Wadsworth Blvd., Denver/Lakewood

Staff Migrations



Phil Baigas joined RMBO in November as a private lands wildlife biologist based in the Saratoga, Wyoming, Natural Resources Conservation Service office. Phil works with private landowners and other land managers in Carbon and Albany counties. He previously worked with landowners on riparian/aquatic issues for Wyoming Game & Fish. Phil went to Appalachia State in North Carolina for a bachelor's degree and received a master's at the University of Wyoming where he did research on moose in the Snowy Range. Of course, in his free time Phil enjoys fishing, skiing, hiking and hunting.

Bart Bly left RMBO in October to become a shallow-lake wildlife specialist with the Minnesota Department of Natural Resources. He had been RMBO's Nebraska Prairie Partners coordinator based in Scottsbluff. Bart stays in touch with RMBO, and contributed to the story on page one about Mountain Plover research.

Francyne DeBauge brought her broad skillset to RMBO in November to take on the Science Team's budget and project management needs and help manage the membership database. She has a bachelor's in international business and economics from the University of Colo. at Denver and has worked as a resource developer in the nonprofit sector.

Michael Smith, RMBO's new IT support specialist, oversees technology infrastructure, provides networking and database support to the staff, and develops tools to improve office workflow and efficiency. He has bachelor's degrees in chemistry, biochemistry, liberal arts and psychology. In his spare time, Michael studies grammar and tends to the miracle fruit tree in his hydroponic garden.

Aaron Sisson, his wife, son and soon-to-be-born daughter moved in December for his new position in Grant, Neb., as RMBO's Farm Bill wildlife biologist. Aaron promotes habitat creation and improvement through NRCS programs. A graduate of Brigham Young University, he did extensive research on Rio Grande wild turkeys and worked with waterfowl and neotropical bird species as a wildlife technician at the National Bison Range Wildlife Refuge Complex.

Birds need friends, too

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If you are already a member, please share this newsletter with friends and encourage them to become members!

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Send me information about planned giving.

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Membership Levels

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Please make check payable to Rocky Mountain Bird Observatory
and mail with this form to:

RMBO

ATTN: Membership

P.O. Box 1232

Brighton, CO 80601

MEMBERSHIP QUESTIONS?

Call 303-659-4348 ext. 12, or e-mail karri.claridge@rmbo.org

THANK YOU for supporting Rocky Mountain Bird Observatory
and bird and habitat conservation!

Grants and Contracts Awarded: August – December 2010

International Program

(For wintering grassland bird inventory and monitoring)

USFWS – Neotropical Migratory Bird Conservation Act: \$240,026

NFWF – Sky Islands Grassland Initiative: \$260,771

Texas Parks and Wildlife – State Wildlife Grant: \$36,087

The Nature Conservancy – Forest Service International Program: \$19,000

(Additional funding)

Commission for Environmental Cooperation: \$24,000

USFS International: \$20,000 for winter grassland bird survival research in Mexico

Education Program

Colorado Kids Outdoors: \$48,000 (split between education and science programs)

Stewardship Program

Audubon Together Green Grant: \$42,000 to support a private lands wildlife biologist in Saratoga, Wyoming

Science Program

Donations to The Levad Memorial Fund: \$475

National Park Service: \$41,507 for 2011 monitoring in the Northern Colo. Plateau Network

South Dakota Dept of Game, Fish & Parks: \$108,596 for the S. D. Breeding Bird Atlas

USDA Forest Service: \$30,356 for 2011 monitoring in Region 2

USDA Forest Service: \$80,000 for 2011 monitoring in Coconino National Forest

USDA Forest Service: \$40,000 for 2011 monitoring in Kaibab National Forest

National Park Service: \$32,000 for 2011 monitoring in Badlands National Park

National Park Service: \$66,000 for monitoring in the Chihuahuan Desert, Sonoran Desert and the Southern Plains Networks

National Park Service: \$99,998 for new project to evaluate migratory birds' arrival dates in response to climate change in 2011 and \$64,500 for 2012



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Primary Source #37 January 2011



Who's Calling?

By Jennifer Blakesley, RMBO Biometrician

More than 50 tiny owls answered the calls of two Rocky Mountain Bird Observatory technicians who were piloting a new survey protocol in Colorado forests last summer.

A nocturnal forest-dweller with dark eyes and a deep voice, the Flammulated Owl weighs less than two ounces. Named for its flame-colored scapular feathers, it is the only owl to breed in Colorado and migrate to warmer climes in the winter. An insectivore, it preys on moths, beetles and other nocturnal insects.

Two seasonal RMBO employees, Tyler Michels and Eric Ressel, conducted surveys throughout Colorado's Roosevelt National Forest from mid-May to early July 2010 by broadcasting a Flammulated Owl call and listening for responses from territorial owls. They heard more than 50 Flammulated Owls in the Ponderosa Pine and mixed-coniferous forests.

Although this owl is not uncommon in good habitat, little is known about its relative population size in various forest-cover types. It is considered to be a "bird of conservation concern" by the U.S. Fish and Wildlife Service, a "sensitive species" by the U.S. Forest Service, and a "species of greatest conservation need" by several states.

To better understand the distribution and habitat associations of Flammulated Owls, RMBO developed and tested a sampling design to survey for this species in collaboration with USFWS, USFS, Idaho Bird Observatory, HawkWatch International and PRBO Conservation Science. The sampling design worked well, and in 2011 RMBO will partner with the USFS and USFWS to survey 12 national forest units in Colorado, Wyoming, Nebraska and South Dakota.



A Flammulated Owl peeks out of its nest cavity.

Photo by Bill Schmoker