

Bitterroot AUDUBON



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NEWSLETTER

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BIOMIMICRY:

How Science Can Follow Nature's Lead In Solving Many Energy and Technology

Did you know that air conditioning was inspired by termites and that *velcro* was inspired by the weed, houndstongue?

There are over a hundred technologies inspired by nature. The Bitterroot Audubon Chapter is pleased to host a program by one of our own on this fascinating



topic. Sherry Ritter, Nature's Strategies Explorer with the Biomimicry Guild, will give a presentation on understanding and using nature's designs.

The core idea in Biomimicry is that nature has already solved many of the problems society faces. Animals, plants and microbes are the consummate engineers and designers. They have found what works, what is appropriate, and most importantly, what lasts here on Earth. Biomimicry is an innovation tool that seeks sustainable solutions by emulating nature's time-tested patterns, processes, and systems. The goal is to create products, processes, and policies that are well-adapted to life on earth over the long haul.

The Biomimicry Guild helps innovators learn from

and emulate natural models by offering workshops, research reports, biological consulting, and field excursions.

Ritter's lecture will include images of nature coupled with the technologies inspired by them. It's the story of a world in which humans meet their needs while fitting in with the environment and creating conditions conducive for all life.

The program will be held on Monday, November 17th at 7:00 P.M. at the Lee Metcalf Refuge, north of Stevensville. The public is invited. Contact Kay

Coyote Coulee Fieldtrip

Kate Shick will be leading a fieldtrip Saturday, 11/22. Meet at 9 am at the Coyote Coulee Trailhead, south of Hamilton. This will be a 3-hour, approximately 3 mile birding hike through low-elevation ponderosa pine and Douglas-fir forest. Wear sturdy shoes and bring water. Contact Kate for details or to carpool from Hamilton (381-1115)

Fulton at 642-3794 for further information.

Save the Date—It's that time of year!

Christmas Bird Counts 2008

12/14 Big Hole

12/20 Hamilton

12/27 Stevensville



Letter from the President

By Fred Weisbecker



Several of our Board members met recently with one of the county's planners at Perkins for lunch. The planning department is working on a natural resource map of the valley. She was interested in our Audubon Chapter and what we do. After relating the many educational and birding activities we do each year, she asked why do you all do these? I will never forget how quiet the room got. I think the reaction was somewhere between humility and being unable to articulate at the spur of the moment how strongly we feel about birds and the environment. Almost everyone there had spent their lives working in the conservation field which was a good indication of their devotion to the natural world. I am sure there are plenty of other reasons for what we do: the sheer joy of bird watching, being around other people with the same interests and values and just making a little difference in the world. Someone asked Skip Horner why he cross country skied to the North Pole? He answered, "*Just to do it for the experience.*" When I lived in North Carolina I never had a desire to hike the whole Appalachian Trail at once but I did enjoy hiking its parts. I doubt if many people at the standing room only program the other night will be heading to the North Pole either but it was nice to hear one man's story. Everyone has a story, so keep enjoying yours and be ready when someone says, "*Why do you do this?*" It might catch you off guard.

Bitterroot Audubon Bird Seed Sale

Bitterroot Audubon is continuing its bird seed sale. We are sorry for the greatly increased prices, but we are limited by the wholesaler's prices. Please send your order with check (made out to Bitterroot Audubon) to: Jim Story, 1336 Honey House Ln., Corvallis, MT 59828 (Tel. 961-4689). Seed orders will be placed every Thursday and can be picked up on the following Tuesday at Sam's Spade, 111 S. Fourth St., Hamilton. Seed prices: Black oil sunflower 10# - \$9, 25# - \$20, 50# - \$38.00; Niger (thistle) 10# - \$30, 25# - \$70; White millet 25# - \$13, 50# - \$23.

Hummingbirds in the Bitterroot

By Ned and Gigi Batchelder

Our research on the migration and breeding of hummingbirds continues in the Bitterroot Valley. This is our third year here, and it is amazing with the number of these tiny birds visiting valley feeders- most folks just do not realize how many hummingbirds they are feeding.



Many recaptures of hummers previously banded by us are being found again in different locations around the valley area. We also continue to band at new yards. Of the close to 50 banding yard locations from Sula to Stevensville in the last 3 years, some of these calliope, rufous and black-chinned are recaptured



more than once. In fact, some are captured every year in the same yard, almost on the very same date.

It seems that breeding areas are more in the western foothills of the valley, while migrants are found in the middle of the valley. In the coming 2009 season, we plan to study more on the east side.

It was a great year for juveniles, with the most ever we have banded in a season since we began our Montana research in 2001. One would hope this indicates a very productive hatching year in Montana, and possibly western Canada. Juveniles generally are found by us and banded no earlier than the first week of July. Many birds migrate through the valley and it is obvious numbers swell at the hummer feeders in July and August.

Full details of our findings will be posted in the "Sightings" page of the Bitterroot Audubon's website (www.bitterrootaudubon.org).

Thanks for feeding the hummingbirds!!!

What's the Story, Story?

By Jim Story

Question: It appears that precocial young have a distinct advantage over altricial young, so why do so many species produce altricial young?

Answer: The primary advantage of precocial young (those that can move about soon after hatching) over altricial (those that hatch naked and helpless) is that the precocial young can avoid predators on their own soon after hatching, an important feature where there are many predators. To enable this level of development, the eggs of precocial birds contain almost twice the calories per



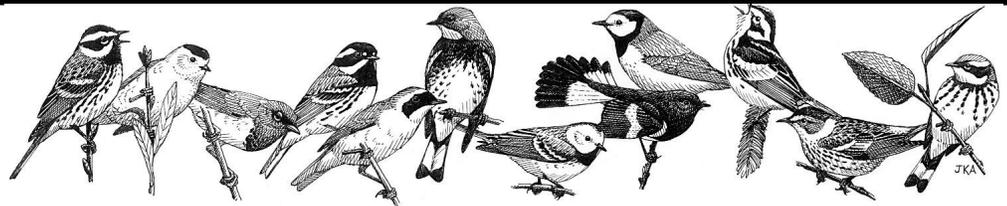
unit weight than altricial birds, which places a heavy nutritional burden on the female prior to egg laying.

Conversely, the nutritional demands of altricial females are far less prior to egg laying, but they must be capable of providing food to the hatched young frequently. Interestingly, adult altricial birds have proportionately larger brains than precocial birds, so there may have been some evolutionary trade-offs related to precocity. In short, both

development modes represent highly successful evolutionary strategies for balancing nutritional needs and avoidance of predation. The altricial mode is obviously the more successful strategy for many bird species.

OCTOBER'S BEST BACKYARD BIRDS

Compiled by Wayne Tree, 777-3159
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Hamilton

Claude Birkeneder	Red-shafted Flicker
Audrey Hobbs	Steller's Jay
Shirley Abel	Osprey
Barry Abel	Cassin's Finch
John Ormiston	Red-breasted Nuthatch
Barb Ormiston	Steller's Jay
Kate Shick	Ruby-crowned Kinglet
Kathy Daniels	Dark-eyed Junco
Mike Daniels	Red-breasted Nuthatch
Aislinn Daniels	Black-capped Chickadee
Leslie Robinson	Blue Jays
Patricia Ryan-Swindler	Cassin's Finch
Ree van Oppen	Blue Jays
Mac Donofrio	no report
Peter Allen	Pileated Woodpecker
Helen Allen	Sharp-shinned Hawk
Jason Allen	no report
Skye O'Byrne	Dark-eyed Junco
Rick Fuhrman	Steller's Jay
Christine Coffin	Pileated Woodpecker

Grantsdale

Colleen Powell	Blue Jay
LM Powell	Song Sparrow
Ted Troutman	Merlin
Dorinda Troutman	Dark-eyed Junco

Roaring Lion

Pat Bartholomew	Pileated Woodpecker
Bart Bartholomew	Gray Jay

Darby

Barb Hoag	Bald Eagle
Bart Hoag	Wilson's Warbler
Veryl Kosteczko	Mourning Dove (16)

Conner

Peg Platt	Blue Jay
Sue Case	no report
Doug Case	no report

Corvallis

Samantha O'Byrne	Clark's Nutcracker
Steve Elie	Northern Flicker
Art Callan	Yellow-rumped Warbler
Nancy Callan	Dark-eyed Junco
Jim Story	Yellow-rumped Warbler
Marlene Story	American Goldfinch
Marie M'Kee	Sharp-shinned Hawk

Corvallis Hills

Lora Pechy	Bald Eagle
Bob Pechy	Ring-necked Pheasant

Victor

Molly Hackett	Bald Eagle (flying low)
Sharon Browder	Gray Partridge
Dan Browder	Steller's Jay
Kevin Browder	Great Horned Owl
Lindsay Browder	Belted Kingfisher
Doris Roberts	Wild Turkey
Betsy Douglas	no report
Kay Fulton	Evening Grosbeak
Carol Santos	Steller's Jay
Johnny Santos	American Robin

Stevensville

Marvin Costello	California Quail
Mary Costello	Ring-necked Pheasant
Patty Laughlin	Cooper's Hawk (juv)
Mike Williams	Belted Kingfisher
David Calkins	Dark-eyed Junco
Patti Calkins	Bald Eagle
Jeanne Tischler	Chipping Sparrows
Jerry Tischler	Song Sparrows
Judy Mason	Blue Jays
Carter Mason	Red-breasted Nuthatch
Wayne Tree	Clark's Nutcrackers
Arla Tree	Merlin
Paul Hayes	Red-breasted Nuthatch
Mary Hayes	Clark's Nutcrackers (4)
Jim Hamilton	Wood Ducks

Dave Lockman

Blakey Lockman
Daniel Lockman
Jenna Lockman
Lorna Lagerquist
Judy Hoy
Bob Hoy
Melinda Hettick
Lynn Moshier
Gail Moshier
Sherri Ritter
Mimi Sauer
Len Sauer

Lee Metcalf Refuge

Bob Danley	Peregrine Falcon
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South Kootenai

Joe Birkeneder	Gray Jay
Marty Birkeneder	Reeve's Pheasant

Florence

Greg Nenow	Golden Eagle
Minta Nenow	Western Bluebird
Jean Osterheld	Ring-necked Pheasant
Mary Gum	Pileated Woodpecker
Pete Scholl	Mountain Chickadee
Kate Davis	Merlin
Michael Koeppen	Pygmy Nuthatch
Lynn Koeppen	Pygmy Nuthatch

Lolo

Al Hinman	Western Grebe
Hazel Hinman	Buffleheads
Dale Dufour	American Goldfinch (albino)
Robert Danley	Townsend's Solitaire
Christine Danley	Yellow-rumped Warbler

Ruby-crowned Kinglet

Pileated Woodpecker
Yellow-rumped Warbler
Clark's Nutcrackers
Clark's Nutcracker
Blue Jay
Ruffed Grouse
Red-breasted Nuthatch
Red-shafted Flicker
Black-capped Chickadee
Sandhill Cranes
Red Crossbill
Steller's Jay