

Central New Mexico Audubon Society

Burrowing Owl

June, July, August 2006 Issue

Volume 35 No. 3

Welcome to Central New Mexico Audubon Society! Come join us. All our meetings and field trips are open to the public. Our missions: "To appreciate, experience, and conserve birds, other wildlife and their habitats; and to encourage and support environmental education in New Mexico."

Birdathon! 2006

As of publication time, Sei Tokuda's team is the winner! But wait—there's more! And it will be published in our fall stand-alone CNMAS newsletter, with reports from the Thursday Birders, who look forward to a record-breaker, and from Celestyn, who is birding and counting for CNMAS. And your part? Just make a pledge to any of these teams, by flat amount or by an amount per species for your favorite team. We thank each and all of you for your donations so far. We'll do so again publicly and personally by name in the next issue of Burrowing Owl. Let us make a special note and a special thank you to supporters of the Young Birders team. We honor these passionate young folks' solidarity and commitment to each other by respecting their request to withdraw from the field this year in honor and recognition of their fellows, both Raymond and Ryan. They have made a promise to return next year for each other, for CNMAS, and for you, their supporters. Thank you, team leaders, team members, team supporters, and all winged friends!

Here is Sei's Birdathon trip report:

Saturday-Sunday, April 22-23:

Bitter Lake NWR and Rattlesnake Springs

There were 15 people in the group. There was a downpour of rain between Roswell and Artesia; and that evening there was a thunder and lightning show and a pretty heavy rain that had the street running with water. Beautiful in sight, sound and feeling good that it was RAINING! And, the fresh smell after the rain... Oh, yes, the birding was pretty good too. We totaled 100 species and the best sights at Bitter Lake were the Black-necked Stilts, Avocets, a Prairie Falcon, the Semipalmated and Snowy Plovers in the same spotting scope field. The best sightings in the Carlsbad/Rattlesnake Springs areas were the Scissor-tailed Flycatcher, the red birds (N. Cardinal, Summer Tanager and the ubiquitous Vermilion Flycatcher), Wild Turkeys, Bell's Vireo, Brown Thrasher and Hooded Oriole.

CNMAS Fall Programs

Premier

Thursday, September 21

Come early for refreshments and socializing! Free and open to everyone. Program starts at 7:15, doors open at 6:45.

St. Timothy's Lutheran Church, 211 Jefferson Street NE
1 block north of Central, 4-5 blocks west of San Mateo

Pat O'Brien will present an evening of beautiful images and good-natured storytelling in a program he calls Profiles In Nature, sharing Nature's palette through his own renowned photography. Pat is a wildlife biologist who (thankfully) came to Albuquerque after his 33 years with Arizona Game & Fish Department, with time in between spent at Ducks Unlimited and Texas Parks & Wildlife. Do join us for this evening with Pat, well-known to us as dedicated volunteer and ambassador of goodwill at Rio Grande Nature Center.

Hold these dates for more Fall Programs:

October 19 • November 9

Call Beth at 505-898-8514 for more info.

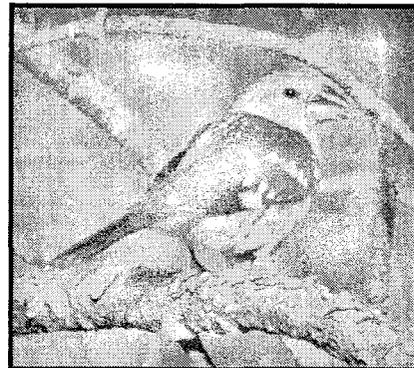


Photo of male Yellow Grosbeak taken by Laurel Ladwig.

We wanted to make sure to mention this visiting citizen of points south, who has been vacationing in Albuquerque for several months, causing quite a stir.

(Thank you Kay & Ray for being such great hosts!)

The Burrowing Owl newsletter is published quarterly in March, June, September, December, by Central New Mexico Audubon Society, PO Box 30002, Albuquerque, NM 87190-0002. Subscription is free to National Audubon Society members, \$12 to nonmembers.



Science Fair: The Future Wins

Once again this year, CNMAS presented four \$50.00 savings bonds to two winners each from the Senior and Junior Divisions. And once again, we thank profoundly our volunteer judges: Lannois Neely, Virginia Lawler, Nancy Phillips, and Celestyn Brozek. The students were gracious and enthusiastic in their appreciation. We honor their teachers, also, each of whom receives a one-year membership in National Audubon Society. Congratulations to all!

Senior Division

Jeremy Hensley

Teacher: Anne Hall, St. Pius X HS

“Salt Cedar Water Usage”

Abstract

I got the idea to do a project like the one I choose to do because of all the problems and incidents that are occurring in the Rio Grande such as the fires. By doing this project I wanted to show people how much the Salt Cedar is really a harm to our environment. Not only is it just a fire hazard but it can also use a lot of water, be fuel for a fire, and grow very rapidly, causing it to kill other native trees out of our environment. A good example to show that they can cause harm to the environment is when the Rio Grande fires occurred, there were so many Salt Cedar they made it harder to put out the fires. They also can use up to 200 gallons of water a day; this can be very harmful to the community and the environment of trees that live around them.

Kyle N. Jaffa

Teacher: Heather Isernhagen, Sandia HS

“An Investigation of Atmospheric Mercury Deposition and Smoke: Phase II”

Atmospheric mercury deposition into water sources is a serious global problem that can cause grave consequences to fish, birds, wildlife, and humans alike. The biomagnification of mercury to toxic levels begins when minute amounts are deposited from the atmosphere into open water sources such as streams and lakes. Bacteria within these bodies of water convert the mercury into an organic form which is ingested by fish. The mercury accumulates in the fishes' tissues and is passed on as consumption moves through the food chain. This problem is especially keen in the southern United States where mercury alerts are common and numerous birds, and native mammals such as panthers, have died from mercury poisoning.

Where is the mercury coming from? Atmospheric mercury releases from anthropogenic sources such as power plants are currently being investigated by the USEPA and new laws are being enacted to control emissions. However, these sources alone do not account for the heavy southern deposition rates. Natural sources of mercury emissions not currently being modeled may also contaminate water. I chose to examine wildfires and other smoke sources as possible under-recognized contributors to mercury deposition because wildfire smoke is known to contain mercury which is emitted during a fire.

Statistics were obtained for large wildfires from 2001-2004. Acres burned, seasonal trending, mercury deposition averages,

and regional data were all analyzed and graphed. Locations of several fires were mapped along with Mercury Deposition Network sites. Lagrangian modeling using the HYSPLIT4 program was conducted to determine particle puff trajectories and dispersion patterns following a fire. MDN sites within the pattern were identified and measurements were graphed. Satellite imagery was used to verify actual plume direction. Results indicated that increased mercury deposition was evident following a fire up to 500km from the fire's location and within three weeks of ignition. There was also strong compatibility between seasonal and regional comparisons of mercury deposition data and fire data.

Further analysis of the southern region identified that prescribed and agricultural burning account for the majority of fires in the south. In particular, data regarding the burning of sugarcane and rice during harvest closely mirrored the region as well as the season of heaviest deposition. Additional research shall be conducted regarding the use of biosolids on cane fields as well as past use of mercury based fungicides on sugarcane setts and how burning the fields during harvest may emit additional mercury.

In conclusion, smoke appears be an important link in the mercury emission puzzle and may be a source of deposition not currently assessed in high risk regions. Continuing investigation into this potential point source may lead to closer monitoring and subsequently a healthier environment for the area wildlife.

Junior Division

Kassandra J. Carson

Teacher: Lisa Sanchez, Grant MS

“Can Yellow Button Ferns Detect Air Pollution?”

ABSTRACT

Several mornings, when I get driven to school, I see haze across Albuquerque's horizon. I always wondered how it affected plant life and vegetation. I had always wanted a way to test what happened to the plant life.

The purpose of this project was to determine if Yellow Button Ferns could detect air pollution as well as they are suppose to.

I started my project with four different Yellow Button ferns to detect indoor and outdoor air pollution.

I was assuming that, to some degree, plants could detect air pollutions. I've heard that ferns are the best at doing that.

I used one control plant and three test plants. The control plant was in the sun and was watered as were the other plants. The first plant I sprayed with hair spray once a day, and used two or three squirts. The second plant was put behind the car for five minutes (my mother did this part). The third plant was at my grandparent's house taking in pipe smoke (I was NOT exposed to the pipe smoke).

The conclusion is that they all detected the pollution well. The hairspray was the least at detecting it because it only got shiny and sweet. The smoke exhaust plant was not as full or green as the control plant and it got a little brown on the edges. The smoke exhaust was not as full or green as the control plant either. It got a little brown on the edges.



Ryan T. Lutz

Teacher: Debra Allen, Annunciation MS

"Don't Toil Over Spilt Oil"

ABSTRACT

On March 24, 1989, the VLCC Exxon Valdez ran aground on Bligh Reef in Prince William Sound in the Gulf of Alaska. Within 3 days, the leaking oil had spread to an area of over 500 square miles. How could Exxon find enough material to clean this spill up?

PURPOSE: To find a cheap, absorbent material that can aid in the clean-up of major oil spills such as the disastrous Exxon Valdez spill.

The materials that I chose had to be easy to obtain, easy to disperse, a good absorbent, and easy to pick up. After brainstorming about possible ideas, I narrowed it down to 3 man-made substances and 3 natural substances: Straw, Popcorn, Wood Shavings, Packing Peanuts, Cotton, and Polyester Batting.

HYPOTHESIS: After reviewing each material, I thought that straw would absorb the most oil. The little bits of straw have a lot of combined surface area, making more space for the oil to adhere to.

PROCEDURE:

1. Mix the Instant Ocean
2. Pour 500 ml of saltwater into one 8" by 8" pan
3. Pour 100 ml of 30 weight oil into the water
4. Place absorbent mixture onto slick and let sit for 5 min
5. Clean out absorbent mixture
6. Measure and record remaining oil and water

RESULTS: Polyester Batting: Absorbed 98% of the oil and 8.4 % of the water

Straw: Absorbed 96% of the oil, and 10.4% of the water

Wood Shavings: Absorbed 92% of the oil and 19.4% of the water
Packing Peanuts: Absorbed 86% of the oil, and 9.2% of the water

Cotton: Absorbed 90% of the oil and 15.2% of the water

Popcorn: Absorbed 78% of the oil, and 8.8% of the water

CONCLUSION: After conducting my experiment, my hypothesis was proved wrong. I guessed that the straw would absorb the most oil, but instead the polyester batting did. It absorbed almost all of the oil, with a minimal amount of water absorption. Could Polyester be used to clean up oil? After my experiment, I came to the conclusion that the ripped up polyester could just be dumped off the sides of boats and later easily collected.

CNMAS Field Trip Schedule

WE NEED FIELD TRIP LEADERS! PLEASE VOLUNTEER AND SPREAD THE WORD!

Below you will find events of interest.

Contact Celestyn at 505-925-8611 or cbrozek@unm.edu

On occasion, we may announce trips on the website which are not announced in our newsletter.

Check our website for field trips:

<http://www.newmexicoaudubon.org/cnmas/#trips>

Friday-Saturday, June 2-3: Water Canyon Bird Count (west of Socorro)

Leaders: Jim Black and Andrew Rominger. Meet Friday evening at 6:30 PM at the Water Canyon Campground. Owling will start at 8:30 PM till 10:30 PM or when ever you want to go to bed. Camping is available in Water Canyon. The bulk of the count will be on Saturday starting at 6:30 AM. If you prefer to meet on Saturday morning, come to the campground between 6:00 and 6:30 AM. Participants will be divided into 6 groups covering everything from Sixmile Canyon (south of Water Canyon), to the campground and all the way to Magdalena Ridge. We try to give people their first choice in terms of area assignment, but if some areas are lacking counters, we might have to do some shuffling around. Please contact Andrew at 505-239-7948 or rominger@stanford.edu or Jim Black at chupaflor@msn.com for details.

Saturday-Sunday, July 22-23: 3rd Annual Hummingbird Festival, Lake Roberts

Guided bird and nature walks, speakers and presentations. Hummingbird banding with Joan Day-Martin. For info: <http://hbnm.org/>, 888-536-4266.

Sunday, August 6: Sandia Mountains

Leaders: Laurel Ladwig and Raymond Van Buskirk. This will be a trip for late afternoon breeding birds, with the owling following a picnic dinner. We'll meet at the Four Hills Shopping Center at 4:00 PM on Sunday, August 6th and bird up the Sandias. We'll break at sunset for dinner and then start owling! Limit of 10 for the owling portion to maximize our chances of actually seeing them rather than just hearing them. People can RSVP to Laurel at 505-362-6871.

Saturday, August 12: Rio Grande Nature Center Summer Wings Festival

Wildlife demos, bird and nature walks, kids activities. For info: <http://rgnc.org/>, 505-344-7240.



CNMAS Field Trip Reports

compiled by Celestyn Brozek

Saturday, February 11: *Sandia Mountains*

Leaders: Raymond VanBuskirk & Laurel Ladwig. We had a great trip with fellow Albuquerqueans and some out-of-state guests. The day began with a Cooper's Hawk flying over the Dion's parking area as we waited for the rest of the group to arrive. The Cooper's was likely scoping out the Rock Doves found in abundance at said parking lot. The biggest surprise of the day was a Band-tailed Pigeon at the lower ski area parking lot. After birding up the mountain, we spent enough time at the crest for everyone to get good views of all three species of Rosyfinches, and eat quesadillas as well. Other species sighted: Crows, Stellar's Jays, Mountain Chickadee, Dark-eyed Juncos, Hairy Woodpecker, White-breasted Nuthatch, Red-breasted Nuthatch, all three species of Rosy-finches, Red-naped Sapsucker, Hermit Thrush, Townsend's Solitaire, Brown Creeper, Western Scrub-Jay, Western Bluebirds, Red-tailed Hawk and Juniper Titmouse. Raymond also heard a Pine Grosbeak and a 3-toed Woodpecker, but we never caught a glimpse of either.

Saturday, February 25: *Bosque del Apache NWR*

Leader: Bob Merkel. 15 participants (including guests from Minnesota) birded at New Mexico Tech campus, Luis Lopez, along Rio Grande and at Bosque del Apache (quite a tour!). Bald Eagles, a great variety of ducks and a few remaining cranes and snow geese were seen. At the Visitor Center, the wintering Harris's Sparrow was still present. White Pelicans, American Avocets, Green-tailed Towhee, Sage Thrasher, Yellow-headed Blackbird were included also in the 72 species list.

Saturday, March 26: *Percha Dam SP, Paseo del Rio SP, Elephant Butte, and Bosque del Apache NWR*

Leaders: Paul Yoder and Celestyn Brozek. Paul Yoder, a resident naturalist at Percha Dam gave us a tour in the morning and updated us on the plans of "remodeling" the park. His major concern was about preserving the areas important for wintering, migratory, and nesting birds. From Percha Dam, 5 participants of the trip made their way north stopping at Elephant Butte, and at the Bosque. 100 species was seen during the day including Lucy's and Yellow Warblers, Peregrine Falcon, and Great Horned Owls at dusk at the Bosque.

Sunday, May 6: *Tucumcari and Ute Lake*

Leader: Chris Rustay. 20 participants showed up for this trip and for a good reason! Chris always finds treasures! This time he had Chimney Swifts, Mississippi Kites (about dozen in one kettle), Semipalmated, Solitary, and Pectoral Sandpipers, Marbled Godwits, Eastern Phoebe, Eastern Bluebirds, Gray Catbirds, Black-and white Warblers, Clay-colored Sparrows, Cardinals, and Orchard Orioles among 81 species seen on the trip!

CENTRAL NEW MEXICO AUDUBON SOCIETY CHAPTER DIRECTORY

CNMAS Phone: (505) 255-7622
Email: jmyers@peacocklaw.com
Webpage: www.newmexicoaudubon.org/cnmas/
Mailing Address: CNMAS, P.O. Box 30002,
Albuquerque, NM 87190-0002

PRESIDENT

Beth Hurst-Waitz 804 Guadalupe Cir NW 87114
home 898-8514, work 243-7029, fax 242-7343 *
brave_c@juno.com

VICE-PRESIDENT

Laurel Ladwig home 254-9834 pbgrebe@gmail.com

TREASURER

Glen Finley 7404 Ankara Rd NE 87122
450-3782 grf@nmlrc.com

SECRETARY

Christopher Rustay home 255-7786
chrustay@aol.com

CONSERVATION & ELECTRONIC COMMUNICATION CHAIRPERSON

Jeffrey Myers work 998-1502
jmyers@peacocklaw.com

EDITOR, BURROWING OWL

Pauline Turtle-Bear Guillermo
265-6094 turtlebear@jensenbear.com

EDUCATION & SCHOLARSHIP COMMITTEE

Helen Haskell home 266-6564 helenm@yahoo.com
Bill Talbot home 764-8272 watalbot@aol.com
Lynn Schuler

FIELD TRIP CHAIRPERSON

Celestyn Brozek home 266-9225 work 925-8611
cbrozek@unm.edu

MEMBERSHIP CHAIRPERSON

(for change of address only)
Ed Dover 1421 San Carlos SW 87104
242-5427 whitecliffs@comcast.net

NEW MEXICO COUNCIL REPRESENTATIVE

Ruth Burstrom 856-2901 rburstrom@aol.com

PUBLICITY CHAIRPERSON

Sylvia Fee 294-4073, nmsylvia@peoplepc.com

BOARD MEMBERS AT LARGE

Dianne Cress work 842-2586 dcress@sld.state.nm.us
Bill Talbot home 764-8272 watalbot@aol.com

BOSQUE DEL APACHE NWR LIAISON

Bob Merkel 838-2296 (Socorro)
BobMerkel@zianet.com



Birding Festivals and Events Calendar Now Online

Audubon's web site now includes a new Birding Festivals and Events Calendar found at <http://audubon.org/birdingcalendar/index.html>. Users can view an entire year of bird related activities around the country for all seasons, from national Counts, to annual migrations, to local festivities. States, Centers, Sanctuaries and Chapters can submit an event online anytime at <http://audubon.org/birdingcalendar/form.php>. Submissions should be for major Audubon-sponsored events that have broad appeal to local and out-of-town participants, and national events of general interest to the birding and conservation community.

*Thanks to all who submitted articles and artwork
for the Burrowing Owl.
This newsletter would not be possible without your
input. Please feel free to send something in for next
time: The DEADLINE for the Fall 2006 issue of the
Burrowing Owl is August 5th. For submissions,
contact Turtle-Bear - Editor or Beth - President.
(See Directory, above.)*



Learning Look - Alikes: Bluebirds

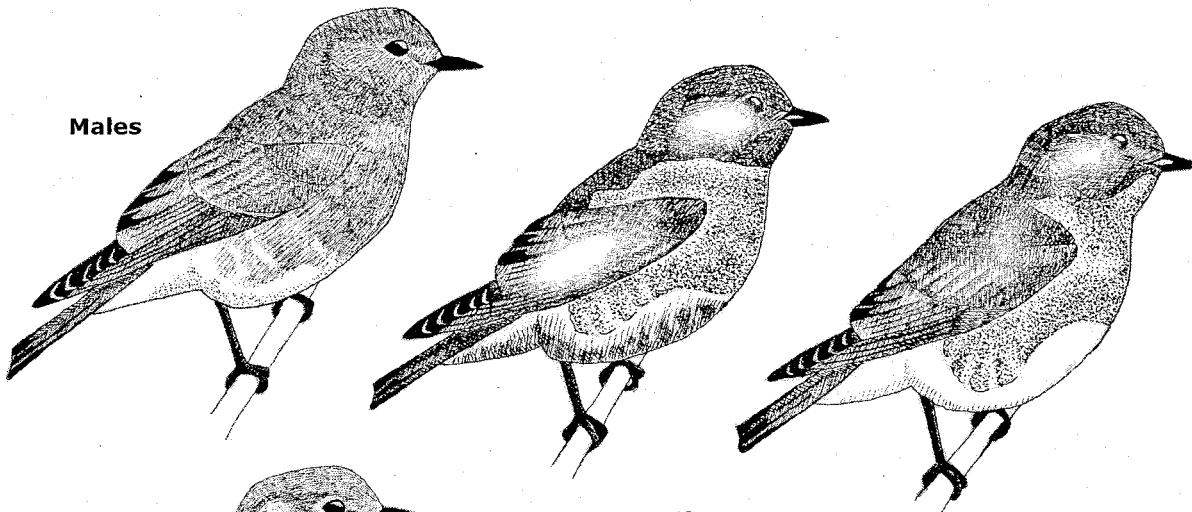
by Art Arenholz, with artwork by Andrew Rominger

Finding a flock of bluebirds adds a lot to any birding trip. Most beautiful when seen in flight, bluebirds are near the top of most birder's "Favorite Birds" list. We will look at Western, Eastern and Mountain Bluebirds and will include both the easy-to-identify males and the more difficult females.

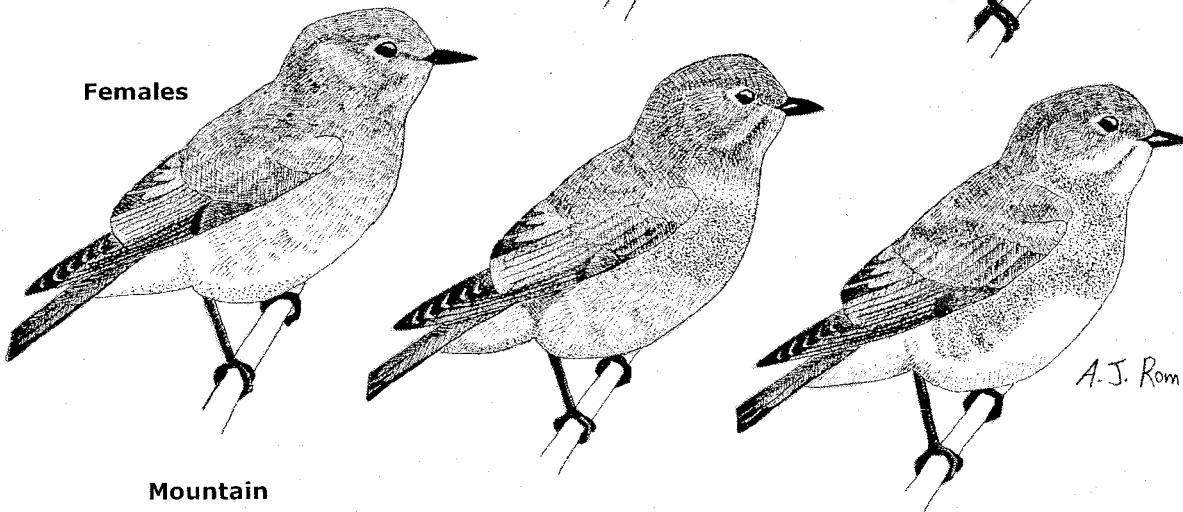
First, let's review the characteristics that all bluebirds share. Bluebirds are a bit larger than a sparrow, are plump, and have large eyes and a dark, slender bill. All have at least some blue marking; the males have lots of blue. All juvenile bluebirds have spotted breasts, similar to young robins. Out of breeding season, they are often seen in small, mixed flocks, perched on fences, wires or small trees, near open country. All have musical, low-pitched calls ("pew") often given during flight and helpful in locating these birds. Bluebirds eat insects in season and add berries (e.g. Juniper) during winter.

Western and Eastern Bluebirds look a lot alike, so let's review them first. Both males have a deep, beautiful blue on the head and the upper-parts. Their chests are rusty and their bellies are pale. There are two main areas to emphasize: the color of the throat and the color of the belly. A Western male has a blue throat and a gray belly, while an Eastern male has a rusty throat and a white belly. Also a Western male almost always has rusty on the scapulars and on the back.

Males



Females



Mountain

Western

Eastern

A.J. Rominger 5/06



Female Westerns and Easterns are similar to the males, except more subdued in color. You could take the "Female Teal identification" approach, and assume the female is with a nearby, easy-to-identify male. Or, you could take a long, good look, search for the gray belly of a Western or the white belly of an Eastern (just like the males).

Usually, a deep blue male bluebird in the eastern part of the U.S. is an Eastern, and a similar bird in the western U.S. is a Western. But in New Mexico in winter, it is not difficult to find both, sometimes even in a single flock. So study the throat and the belly, and you can sort out the Western and Eastern Bluebirds.

The male Mountain Bluebird is considered by many birders to be among the most gorgeous birds. He is quite different from his two lower altitude cousins. Overall he is a powder blue (or turquoise blue), with lighter blue under-parts. In good light, especially when hovering, he is stunning. Another good clue for the Mountain Bluebird: no rusty color anywhere, unlike his two cousins. Female Mountain Bluebirds are also quite different from their cousins. She looks uniformly gray, with hints of blue in her wings and tail. Once again, just like the male, the lack of any rusty color is different from the rusty under-parts of her two cousins. So, to identify a female Mountain Bluebird, look for overall gray, with hints of blue in her wings and tail, and no rust color anywhere.

Bird behavior can also give a useful clue for bird identification. While not usually diagnostic by itself, it can help confirm a bird's identification. For example, Mountain Bluebirds often hover-hunt, while the other two species either fly-catch from a perch or flutter down from a perch to the ground to catch insects.

So my suggestion is to enjoy any bluebirds you find and gradually learn to tell them apart. Perhaps the summary table will help you recall the key identification clues.

I.D. Feature	Western male	Western female	Eastern male	Eastern female	Mountain male	Mountain female
Color of head, wings & tail	Deep blue	Gray-blue	Deep blue	Gray-blue	Powder blue	Gray-brown; touch of blue in wings, tail
Color of throat	Deep blue	Gray	Rusty-red	White	Light blue	Gray-brown
Rusty-red on breast?	Yes	Yes	Yes	Yes	No	No
Rusty-red on back?	Almost all do.	No	No	No	No	No
Color of belly	Gray	Gray	White	White	White	White
Rusty-red anywhere?	Yes	Yes	Yes	Yes	No	No
Hover to catch insects?	Rarely	Rarely	Rarely	Rarely	Often	Often
Juvenile-spots on breast?	Yes	Yes	Yes	Yes	Yes	Yes
Juvenile-spots on back?	Yes	Yes	Yes	Yes	No	No

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