The broad-tailed hummingbird is the characteristic species of New Mexico mountains. It breeds in forests above approximately 6,000 feet. That means that most of us in Albuquerque need to drive up the foothills of the Sandias or the Jemez to find this species; we’ll start noticing them around Cedar Crest or Jemez Springs. The wings of adult males make a conspicuous high-pitched, musical-sounding trill that is unmistakable.

Between elevations of 6,000 and 8,000 feet, the black-chinned hummingbird and broad-tailed hummingbird overlap and compete for nectar resources. UNM student Bethany Abrahamson is studying the interactions of these two species in this zone of overlap. She wants to figure out why the black-chinneds don’t breed higher, and why the broad-taileds don’t breed lower. To solve this mystery, she is observing hummingbirds and their competitive interactions at hummingbird feeders between the Rio Grande Nature Center and Sandia Crest.

For New Mexicans, there are very few excuses for not feeding hummingbirds, especially if there are kids around to enjoy them. Hummingbird feeders provide cheap entertainment, but they are also great tools for doing science projects. They make it easy to quantify competitive behavior, food consumption, or hummingbird preferences for color, nectar concentration, or feeder location. With regards to feeding, there is an abundance of advice available on the internet, but most of it is excessively complicated. Here are my guidelines for keeping it simple: (1) Make nectar by mixing three parts water with one part sugar; (2) Rinse with water and refill the feeder when it is 1/2 full; (3) Use a wind-proof feeder.

Remember that hummingbirds are smart, tough, and adaptable, and it’s unlikely that you could do harm to them by making mistakes in your feeding protocol. Nectar is highly variable in flowers, and hummingbirds can tolerate a wide range of sugar concentrations; one proven method to bring hummingbirds to your yard is to make sure that your nectar is slightly more concentrated than your neighbor’s. If you feed regularly, hummingbirds will remember your yard and you will slowly build up a clientele just as the Nature Center feeders have done over the years. Even migrant hummingbirds en route from Alaska to southern Mexico have been known to stop over at the exact same backyard feeders year to year. And lastly, don’t forget to set up your chair by the feeder … and observe.

Continued on p. 9
Away!

With Summer Wings on the horizon, we’re getting the bugs out — the bees, dragonflies, and hummingbirds, too! As you explore the vast world of small animals, discover again the curiosity and joy of a child in the waving antennae of a beetle, the weaving magic of a spider, and the foldaway tongue of a butterfly.

**Toys and Gifts for Kids**
- Two-way microscope (top and side), $12.
- Butterfly Net with Wooden Handle, $6
- Butterfly Stickers, $1.
- Nineteen-piece Butterfly Building Set, $18.
- Butterfly Bungalow: Box with Viewing Screen, $5.
- Ant Universe, $17.

**Books for Kids**

**Books and Gifts for Adults**
- Hummingbird Earrings by Mary Gutierrez: Silver and Colored Glass. $12-$18.
- Sun Protection Hats in Blue and Brown. $19-$38.
- Judith Roderick Bird Cards. $3.50 each.
- Friends’ Logo Long-sleeve Tees for Adults & Kids. $14-$22.
- Hummingbird Photos by Celestyn Brozek: Black-chinned, White-throated Mountain Gem, Green Violet-ear, Broad-Billed. $22 each.

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1To experience what the exchange student experienced, sit quietly and motionless next to one of the Rio Grande Nature Center hummingbird feeders during late summer.

2This is one of our latest findings from the field. To hear more about our hummingbird research at the UNM Department of Biology, visit: [http://biology.unm.edu/Witt](http://biology.unm.edu/Witt)

3To slow down the world of the hummingbird, watch the spectacular PBS documentary, “Hummingbirds: Magic in the Air,” which is available at pbs.org free of charge.

4Bethany is looking for help with this study, especially if you maintain a hummingbird feeder that you wouldn’t mind her visiting. Contact her at babraham@unm.edu.

5We like the Best-1 feeders, but use a piece of painter’s tape on the threads before screwing it together to insure a tight seal. Use an ant-moat for neat and chemical-free ant protection (Duncraft makes one that is evaporation-proof). And if you live in bear country, use a long pole to hang feeders safely out of reach.

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Chet Brown

The Staff and Friends of the Rio Grande Nature Center mourn the loss of volunteer Chet Brown, USAF Major (Ret.), who died March 13. Decorated combat veteran of the Korean and Vietnam wars, avid balloonist, and husband of former RGNC superintendent Karen Brown, Chet devoted head, heart, and handiwork to every kind of job that needed doing at the Nature Center. Beginning in 1991, he cut brush; built exhibits and the storage shed; designed, built, and installed shelves and sales cases in the Nature Shop and then sold merchandise there. He also trained as an interpretive naturalist, leading visitors of all ages through the park and into the bosque.

Chet Brown continues to flies high through this cottonwood forest.