## THE GREAT OUTDOORS



Many gentoo penguins return to the same partner each mating season. They have elaborate courtship behaviors even after nesting begins. This female (left) in Antarctica is incubating an egg on stones gathered as part of the courtship and nesting rituals. Photo: J. Morton Galetto

## The Mating Game

In the animal world, courtship runs the gamut form beak snapping and tail displays to cannibalism.

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One of the best-known courting behaviors occurs when male birds make food passes to females. The behavior is called "allofeeding." This happens during mating season when the male wants to show off that he will be a good provider of sustenance for the

anticipated brood, should he be the selected suitor. Less well known is "allopreening," where one bird tidies up another bird's plumage.

In the avian world being well-groomed means you need to preen often. One of the world's most famous mating displays belongs to India's peacock, which fans its huge tail creating a wall of color. To pull off its showy tail pageantry, males spend more than half their time arranging feathers - preening. We have a fancy fan dancer in our region as well: the wild turkey. Both of these birds swivel about holding their feet closely together, so females can fully appreciate them from all angles.

Some of the world's most elaborate mating displays belong to the birds of paradise. Their body shapes are transformed to what often bears little resemblance to its former self.

The satin bower bird of Australia sets up a bower, or arbor of sticks. There it assembles blue items that it has collected and put on display. The male has striking blue-black feathers (similar to our grackle when brightly lit) and vibrant violet eyes. In one arboretum I visited in Australia, one such bird had collected all manner of blue items left as

litter by people. Once the bower is built, the male proceeds to dance.



An immature satin bowerbird in Australia (green plumage as opposed to blue adult feathers) has made a bower from sticks as a lek to attract a mate. He is collecting blue bottle caps as romantic gifts. Photo: J. Morton Galetto

The blue-footed booby of the Galapagos Islands goes to great lengths to attract a female. His display in human terms would be dubbed a foot fetish. The male perches upon a rock, generally about 12 inches above the anticipated scrape nesting site, and lifts one foot at a time, showing a bit of "sole" dancing.



A blue-footed booby in Galapagos performs a sole-ful dance for his mate.

In proximity to this ritual one often sees the courtship of two waved albatross clearly in rapture. Waved albatross have a wingspan of 12 feet and stand a bit over three feet tall. And it is not uncommon to see a large nesting colony on specific Galapagos islands. Their courtship involves bill snapping (think castanets), then dueling of beaks, and finally sky pointing. The dueling sounds like adults practicing fencing skills with wooden swords.





Waved albatross go through an elaborate courtship ritual of beak snapping and sky pointing. They are among the species of birds that practice fidelity. Photos, Galapagos. Photos: J. Morton Galetto

Many mating advances are not initially as noticeable. I witnessed the courtship of the American toad in the Susquehanna State Park, Maryland. It was April, springtime, and there were many large puddles and vernal ponds. The park was filled with a long highpitched trill, creating a steady drone of hundreds, possibly thousands, of toads. Love was clearly in the air. Females tended to be floating with their chins resting along the edge of the pond. If they rejected a suitor, they pushed him away with a swipe of a back leg. But for those males who were accepted they protected their prize, literally launching any approaching males with a swift kick that threw them a few inches out of the water. My two friends and I were totally amused by the mating escapades of flung toads.

Many people are unaware that some fish make mating calls. The oyster toadfish, a local resident, is one such species. You may know the fish by any number of other names oyster cracker, oyster catcher, dog fish, mudfish, ugly toad, oyster dog, bar dog, or singing fish. Males excavate a nest under rocks and begin to serenade, advertising their new digs. The calls sound like a far-off fog horn. If a female is attracted she will lay eggs on the sides of the structure. She skips town and then the male fertilizes the eggs and defends the developing embryos. In a month's time the eggs hatch. Even when the young can swim the male will continue to protect them.

Some romance, especially in the insect world, is surprisingly harsh. Praying mantis love results in sexual cannibalism 16 percent of the time. Most males hurry the event in an effort to avoid being the last supper. The female black widow spider is 30 times heavier than the male; the human equivalency would be 200 pounds versus 6000 pounds. The male leaves a part of an appendage called a "palp" behind when he fertilizes the female, and then he skips town ASAP or risks becoming arachnid soup.

Some folks might think the foreplay of a walking stick to be admirable. These insects look like a stick, just as their name suggests.

However, everything with a walking stick is dependent on slow motion to avoid detection. A male will latch on to a female for up to 59 days, although the time is not all devoted to mating. What's happening is a practice known as "mate guarding." Deer mate guard as well, by travelling very close to the doe. The buck waits until his intended is in estrous to ensure that he furthers his line.

Octopus will guard a mate's den. They are known to be amorous and intelligent, even with their keepers in aquariums. But the act of consummation is done at arms-length, during which he delivers a sperm sac (hectocotylus) to the female's oviduct. Possibly getting too close could cause an entanglement?

People are often interested in the life-long romances of animals. It is not as common as seasonal fidelity or "hit and run," there are a number of creatures that mate for life unless one of the pair perishes. Some well-known bird species exhibiting fidelity are penguin, swan, eagle, albatross, barn owl, goose, black vulture, Atlantic puffin, scarlet macaw, sandhill crane and others. Seahorses also practice monogamy.

While there are power couples in the mammal world it's unusual. It is estimated

that only three to five percent engage in monogamy. Some that do are the wolf, prairie vole, coyote, gibbon, and titi monkey.



Coyote are one of but a few power couples in the mammal world observing monogamy. Photo: Steve Gifford



African penguins generally mate for life and live in colonies. Penguins shown here at Table Mountain National Park, Boulders, S. Africa. Photos: J. Morton Galetto

Many animals have odd mating rituals. The porcupine is especially weird. You might say the male showers his intended with affection: he urinates on the female, and if she is receptive she will present her soft quill-less under patch, enabling them to mate. Otherwise it would present a prickly situation.



Porcupine romance is a strange and prickly affair. Photo: Tom Field

Well, I've no idea of your plans for Valentine's Day but hopefully it is not a porcupine affair. If I were to coach you, I'd suggest, flowers, chocolate, wine, flowers, and possibly a night out. Whatever you choose, be sure to be properly preened.

## Sources

Habits and Life History of the Toadfish, nesting habits, by E. W. Gudger, Ph.D., State Normal and Industrial College, Greensboro, NJ, 1908