

#### ***4. Animals and Fire***

What happens to the animals during a fire?

It is amazing how little the wildlife suffers from fires. Americans have been conditioned to believe that fire is always bad, whereas natural fires and controlled burns done in the natural fire season are beneficial to animals and plants alike. We can thank the Forest Service's Smokey the Bear's message: "Only *YOU* can Prevent Forest Fires" and the movie *BAMBI* for that common misconception. Deer are quite nonchalant about fires, grazing until the fire is close and easily moving on ahead of it into some wetland such as a cypress dome.

Just as the plants that live in ecosystems where lightning-caused fires are normal have adapted to fire, so have the animals. Animals that have moved into such systems lately, such as armadillos in Florida, have not had the time necessary for natural selection to work its evolutionary magic on their species. The only skeletons we have seen in our burned areas after a fire have been those of armadillos, except for once when a male gopher tortoise skeleton was found – upside down, indicating that that gopher had lost a battle with a rival who turned him over and left him to die. Armadillos dig burrows and presumably remember where their burrows are, but somehow don't know what to do when a fire approaches.

Native Florida animals, including insects such as grasshoppers, katydids, beetles and other flying insects move quickly away far ahead of an approaching fire. Mammals and reptiles head for the safety of their own or gopher tortoise burrows, waiting until the fire has passed in close company with otherwise natural enemies. Rabbits and rattlesnakes, mice and foxes might all be sharing the gopher tortoise's hospitality. Ground-nesting birds such as quail and vultures might lose eggs or nestlings from fire, but if the fire is in spring or early summer, the adult birds, that have flown out of the fire's reach, will nest again.

#### ***Gopherus polyphemus***

The gopher tortoise is the *keystone species* of drier ecosystems such as scrub, scrubby flatwoods, pine flatwoods and dry prairie. It is called that because so many of the other species in those ecosystems depend on the burrows the gophers dig for protection from fire. Sometimes the burrows flood, and you might hear a gopher splashing around down there!

Male gopher tortoises have longer prongs under their necks (when their necks are extended) than females. These prongs are extensions of their under shell, or *plastron*. Male gophers fight by attempting to turn each other over with these weapons. If a turtle is upside down and cannot get a foothold on anything to right itself, it will eventually die – unless some other animal comes along and turns it over, such as a dog wanting to play with it. Male gophers have concave plastrons, enabling them to mount females to mate. Females have flat plastrons, "to make room for eggs," you can tell children. The top shell is called the *carapace*.

People should not bother gophers *UNLESS* one is on the highway heading for destruction. If it is safe to do so, please stop on the shoulder and take the turtle off the road *in the direction it is heading*. If you take it back to the side it came from, it will just turn around and try to cross again. It knows where it is and where it wants to go – probably toward those pheromones it is smelling! (Mating season is spring and early summer.)