



Occurrence of Nine-banded Armadillo in Kentucky

Natural History

The nine-banded armadillo, *Dasypus novemcinctus*, is a solitary, nocturnal animal. Where other mammals have fur, the armadillo is uniquely known for its armor. This armor is made of dermal bone plates that are covered by leathery scutes, or, to put it simply, little flat bones encased in horn (similar to cattle horns). Though it is named the *nine*-banded armadillo, this species has anywhere from seven to eleven bands between the larger plates shielding the upper and lower parts of its body.

Armadillos are adaptable and can be found in many habitat types including tropical rainforest, open prairie, scrublands, and forests. They can survive in rainy environments as well as semi-arid environments. However, they have a low metabolic rate and struggle to maintain fat stores, so their range is limited by cold weather.

Armadillos are prolific diggers and have long claws to help dig burrows and scrounge for bugs. They have very poor eyesight, and rely heavily on their sensitive nose to sniff out insects underground. They primarily eat insects, beetles, worms, and other grubs, however they do occasionally eat eggs. Because of this, armadillos may be encountered near nests of turtles, turkeys, other egg-laying wildlife, or even in chicken coops.

Each spring, after a four-month gestation, a female armadillo gives birth to four identical quadruplets. These quadruplets develop from a single fertilized egg which buds into four identical embryos after implanting into the uterine wall, and leads to the pups being either all male or all female. The pups are precocial, but the horn covering their dermal bone plates takes a few weeks to harden. Both sexes may begin breeding at one-year-old, but it may take two years to reach full sexual maturity.

Unlike its three-banded cousin, the nine-banded armadillo cannot roll into a ball for protection and instead runs or quickly digs into the ground for defense. Another defense method armadillos employ is the vertical leap. They are capable of jumping up to four feet high when startled, a tactic that is thought to scare off predators and is one of the reasons armadillos so often end up the victim of roadkill. When a car on the highway tries to straddle an armadillo in an attempt to save its life, the spooked armadillo may jump straight up into the car as it passes over top of them.

Armadillos are not aggressive toward people or other wildlife but may scratch or bite if handled. Nine-banded armadillos can carry leprosy, which is transmissible to people, so contact with armadillos should be kept to a minimum, and they should not be eaten.

Observations

The nine-banded armadillo is found across much of the southern and western U.S. Reports of nine-banded armadillos in Kentucky started in the mid-1980s. Throughout the mid-1980s and 1990s, the department received only occasional reports of armadillos, but by the early 2000s they had become fairly common in counties as far east as Land Between the Lakes (LBL); expanding to the north and east from Mississippi, Alabama and Tennessee.

The first report is dated June 15, 1983, though this report has never been verified due to lack of detail. Three years later, a local newspaper documented an armadillo found in LaRue County on May 22, 1986. Just two months later, a former KDFWR employee found a roadkill armadillo in Marshall County. Four more armadillos were reported in 1986. The last of these, found dead on West Kentucky WMA on Dec. 5, 1986, is now in the vertebrate collection at Paducah Community College.

In the early 1990s, a deck hand working a barge line that traveled the Mississippi noted several occasions of armadillos walking on barge loads of sand, gravel, bark mulch and other materials coming up from the deeper south (Louisiana, Mississippi, Alabama, Arkansas, and Tennessee). This may imply that armadillos were accidentally loaded into the barges with these materials and could be how armadillos were introduced to Kentucky initially. However, there were few early reports of armadillos being spotted along the banks of rivers (a favored denning habitat), so it is possible they arrived here on foot.

Interestingly, there are two reports of armadillos found in pools – the first in May 2012 and the second in August 2020. Both were alive and well. There seems to be only one report of an armadillo in a reproductive stage. John MacGregor, herpetologist with Kentucky Fish and Wildlife, spotted an adult with four pups along the road at night in LBL sometime before 2018, exact date unknown.

Citizen scientist apps, such as iNaturalist, have also served as a helpful tool in armadillo population monitoring. To date, there have been over 20 submissions of armadillo sightings to iNaturalist.

Since the earliest reports, the armadillo population has expanded as far as Rowan, Knott, Pulaski and McCreary counties. In recent years, they have even moved as far as southern Illinois and southwest Indiana. It is expected that the range of the nine-banded armadillo will continue to expand.

The increase in armadillo sightings has driven an increase in interest in the species. In summer 2007, for example, there was a fair amount of traffic on kentuckyhunting.net about sightings of roadkill armadillos in Kentucky. The following locations were mentioned in particular: LBL, Crittenden County, Edmonson County, Graves County, Logan/Todd county line, McCracken County (especially the Paducah area), and Muhlenberg County.

While the department has no estimate of their population numbers, these days armadillos are so common in some areas that reports are no longer being made about them. Scott Harp, the Green River Regional Coordinator for Kentucky Fish and Wildlife, considers armadillos in the

[Purchase Region](#) to be “fairly common,” and says that they are seen regularly on the Natcher Parkway. He added that armadillos in the [Green River Region](#) are “uncommon,” and everything east of that would be considered “rare.”

In February 2019, a roadkill armadillo was discovered in Kentucky’s easternmost county, Pike. It is possible that this individual migrated from other parts of Kentucky, but KDFWR herpetologist John MacGregor theorizes that it or its immediate ancestors came into Kentucky from Virginia. Armadillos in southwest Virginia may have followed the Clinch River drainage to make their way into Pike County. From there, they may continue moving west and north until they meet the established western populations.

Over the past 35-40 years, armadillos have quickly expanded their range from the deeper south into large portions of southern and western Kentucky. The terrain and cold weather of eastern Kentucky may have functioned as an ecological barrier to their migration in the past, but this may change in the coming years. Thus, it is possible that soon we may see armadillos in every county in Kentucky.