

Benjamin Reed

Testimony presented to the Committee on Agriculture as a Proponent for HB 2479

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First, I would like to thank Chairman Rahjes and members of the committee for this opportunity to state my support for HB 2479. I have a Ph.D from the University of Nebraska-Lincoln in Ecology, with my dissertation work focused on the ornate box turtle (*Terrapene ornata*). I have professionally studied the ornate box turtle from 2013 to present. Currently I am an assistant professor of biology, teaching classes in ecology and behavior. I also oversee student research projects, with a recent ornate box turtle project (2020) selected to be presented at the state capitol as part of the Undergraduate Research Day. My research includes extensive survey work, long-term monitoring of individual turtles, and demographics (including quantifying birth and death rates). In addition, I regularly engage in public outreach events where I interact with various groups (adult/children) for educational experiences with box turtles.

I am a proponent for HB 2479 for several reasons, including at the scientific, cultural, and personal level. From a scientific standpoint, it is clear that turtles are objectively declining throughout their species range (which includes all of Kansas). Listed as protected or endangered in other states, Kansas remains behind in the management/protection of ornate box turtles. Turtle population decline can be attributed to a number of factors, most notably illegal capture and poaching. Currently in Kansas any individual can collect up to five box turtles at a time which helps incentivize poaching activities throughout the state. Turtles have a unique life history. They easily live 40-50 years yet do not reach reproductive age until they are around 10-years old or older. They don't consistently reproduce every year. This means the consequences of our actions taken today may not be detectable for another 15 years. Turtle nests are rarely successful, with one turtle surviving per nest to adulthood extremely unlikely. Thus, it is crucial that populations have plenty of adults to ensure enough offspring are produced per year to replace adults lost to other causes. Declining adult populations will significantly reduce future population size as fewer offspring would be recruited each year. The proposed bill will help reduce the number of turtles that can be removed from the habitat by poaches which is an extremely critical step in slowing population decline throughout the state. Why should we care if box turtle numbers decline or not? Box turtles are important seed and spore dispersers, they prevent disease spread by eating carrion, they are important pest (including insects and rodents) and weed consumers, the young are prey to dozens of mesopredator species, and they dig holes or share holes used by many other species for refuge.

Culturally, the ornate box turtle is the state reptile of Kansas and is an iconic species of the American Midwest. Box turtles have been celebrated in religion and mythology throughout their range and are considered a symbol of longevity, tenacity, and wisdom. Personally, I have marveled at the turtle since I was a young child. Turtles are one of the smallest and most imperiled vertebrate groups in the world today. They have outlived the dinosaur and multiple ice ages. They have endured so much as a group, yet human activity (such as poaching which this bill is directly addressing) remains inexcusably permissible for many turtle species including the ornate box turtle. The loss of ornate box turtles in Kansas would be devastating for local ecosystems and humans alike.

Thank you for your time and consideration of HB 2479. I will be happy to address any questions.

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