

Ohio Department of Natural Resources

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Senate Government Oversight and Reform Committee Testimony on Senate Bill 123 Provided by the Ohio Department of Natural Resources April 9, 2019

Good afternoon Chairman Coley, Ranking Member Craig and Members of the Senate Government Oversight and Reform Committee. My name is Mike Angle and I am the State Geologist with the Ohio Department of Natural Resources (ODNR) Division of Geological Survey. Joining me today is Mark Peter, who serves as the Department's paleontologist. Thank you for giving us the opportunity to provide testimony today on Senate Bill 123.

SB 123 represents a great idea. The *Dunkleosteus terrelli* represents one of Ohio's best-known fossils and has captured the minds of scientists, hobbyists, and school children for decades. Fossils are a great way to connect with children and adults, and introduce them to geology, biology, and ancient history. People's interest in prehistoric creatures commonly gravitates towards apex predators such as, the T-Rex, sabre-toothed tigers, or great white sharks. The *Dunkleosteus terrelli* is the epitome of the Devonian apex predators. Numerous specimens of this creature have been found in the Devonian-age Ohio shale, which extends from south of Chillicothe, north to Cleveland, and then east to Ashtabula. Several specimens were collected in the Cleveland area and are a popular display at the Cleveland Museum of Natural History. Dunkleosteus may also be viewed at the Rocky River Reservation Nature Center, Highbanks Metro Park in Delaware County, the Orton Museum at The Ohio State University, and at ODNR. While other finds have been made elsewhere in North America and Europe, the Ohio fossils were among the first-described, most numerous, and best-known representatives of this exciting group of fish.

During the late Devonian Period (359-382 million years ago), much of what is now eastern and central Ohio was overlain by a deep and narrow sea. The sea was laden with nutrients and fish, and other sea life thrived. The Devonian Period is referred to as the "Age of Fishes," when aquatic life expanded and diversified to create remarkable varieties of fish. As fish died and sank to the ocean floor, many fossils were preserved for us to find today. *Dunkleosteus terrelli* was one of the larger members of the Dunkleosteus family and may have grown to greater than 20 feet long and possibly weighed up to 4 tons. Imagine a fish the size of a great white shark, heavily armored, with the attitude of a piranha. Their bite could generate up to 80,000 pounds per square inch. Many specimens show scars and wounds signifying their aggressive habitat.

In addition to our written testimony, we have provided a few supplemental pieces of information on the *Dunkleosteus terrelli* to give you a better idea of the how this fish thrived 358 million years ago in the seas that eventually became modern northeastern Ohio. These include a copy of Fossils of Ohio, the Ohio Rocks! Activity Book, some large posters, and an actual fossilized jawbone of a specimen.

Mr. Chairman, members of the Committee, thank you again for giving Mark and I the opportunity to testify on this bill. ODNR believes that SB 123 is a great vehicle to engage Ohioans of all ages, but especially school children, in Ohio's rich geologic history. We would be happy to answer any questions you may have.