

## **ABSTRACT**

**CREATIVE PROJECT:** The Amateur Paleontologist: A Guide to Fossil Collecting in Park and Bighorn Counties of Wyoming

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The northwestern corner of Wyoming (Park and Bighorn counties) is a geological paradise for fossil hunting enthusiasts and scientists alike. Geologists have been collecting fossils in this part of the country to help further their understanding of rock formations for many years. Scientists and informed enthusiasts know where to find fossils based on aspects of geology, and possess the tools necessary to collect the fossil without damaging the surrounding rock. Tourists and amateur fossil hunters find these sites through word of mouth and hunt for fossils there, often ruining the site for future study. In addition, amateur fossil hunters sometimes lack the knowledge to locate correct sites, and end up searching the wrong rock layers in vain. A fossil guide, as an iPhone application, that includes locations of known fossils in Park and Bighorn counties of Wyoming, a background on the geology of the region, and how to collect fossils correctly would be helpful for tourists and educators alike. Tourists would learn how to locate fossils based on the surrounding geology, what the fossils are, and how to take the fossils from the surrounding bedrock. Teachers could use the guide to instruct students about geology in the field. They can also use the guide to pinpoint locations that are of great

geologic significance, teach about “a day in the life of a paleontologist,” and allow the students to search for an item to take home to remember the day. Past guides have included the geologic history and descriptions of locations, but none have included fossil locations using GPS. This guide is an effort to consolidate as many different sources as possible. Geologic knowledge, GPS waypoints, tools for collecting, laws of collecting, pictures of fossils, and paleontological knowledge will be included in the guide. This guide will provide practical information in a user-friendly format that increases the user’s geologic and paleontologic knowledge and will also help protect geologically valuable sites from being plundered.