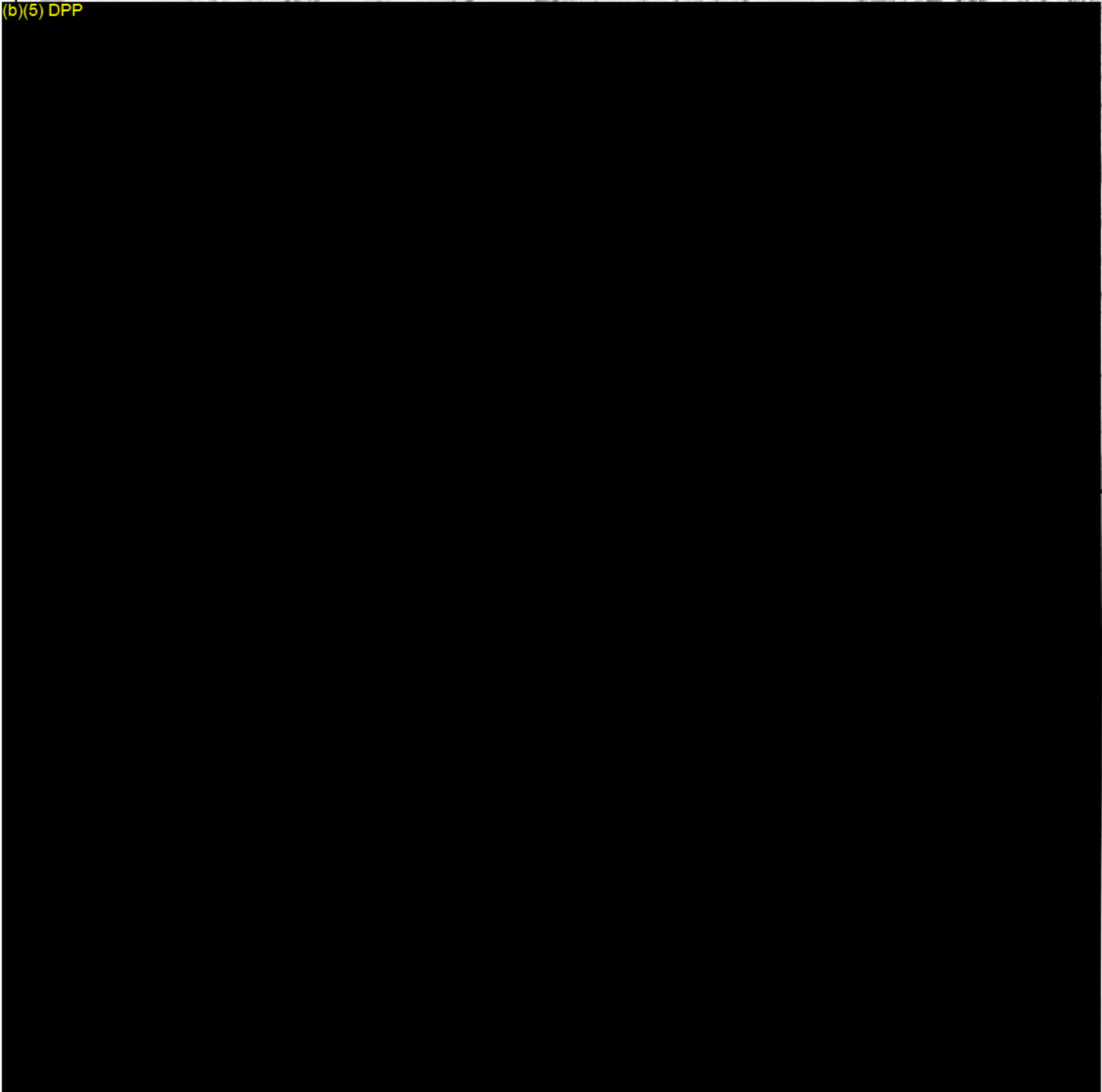


(b)(5) DPP



(b)(5) DPP



5 Extremely Important
4 Very Important
3 Important
2 Less Important
1 Least Important

DOI-2020-02 01866

DOI-2020-02 01867

DOI-2020-02 01868

(b) (3) (B) PRPA 6309

DOI-2020-02 01870

(b) (3) (B) PRPA 6309

PALEONTOLOGICAL SITE QUERIES 2 & 3

SITE VALUES

5 Extremely Important – Holotype locality, source of extended field excavation, or known to preserve multiple fossil vertebrate taxa.

4 Very Important – Vertebrate sites or dinosaur trackways that are found in-situ and are expected to contain more fossils.

3 Important – Paleontological sites that have vertebrate remains, or unusually well-preserved non-vertebrate assemblages of fossils.

2 Less Important – Invertebrate sites or sites that contain well-preserved or in-situ plant fossils. Also includes locations where either poorly-preserved or out-of-context vertebrate fossils have been reported.

1 Least Important – Non-vertebrate fossil sites that are out of context, including reported occurrences of petrified wood.

These assignments are created specifically for this analysis and are based on available data housed in the Utah Geological Survey fossil inventory (BLM-Utah has a long-standing partnership with the Utah Geological Survey to share information about paleontological resources). Some sites are well documented, but many are not. Higher assignments (“4” or “5”) are assigned when there is enough data to know that important fossils are present and there is a high likelihood that more fossils will be found in the future (such as an indication in the record that a team should return to continue collecting, or if an important fossil was only partly excavated). Similarly, lower assignments are given where fossils represent common taxa or have less scientific importance. A “3” is assigned to a site when there is an abundance of less important fossils or when more important fossils have been collected, but the fossils were out of context or were fully collected. Vertebrate fossils are given higher assignments than non-vertebrate or plant fossils. Petrified wood, unless it represents an unusual occurrence, is assigned a “1”.

In order to avoid speculation, incomplete records of potentially important fossils are assigned a “3”. Many of those records will warrant either higher or lower assignment after they are visited and verified in the future.

IMPORTANCE

All reported fossil sites were judged important enough to be reported at the time of discovery, so even an assignment of “1” indicates that the site has a potential for future research or educational uses. The scale employed for this exercise is based on the shared assumption that some fossil sites are more important than others, or have more potential to reveal important information in the future.

ADDITIONAL PALEONTOLOGICAL SITES

Most of the records contained in these queries were recorded during field inventory conducted between 2001 and 2005. There are currently an additional 684 fossil sites in the Kapirowitz Formation that are in or near the areas of interest, but have not been added to the site inventory (18 of the additional sites would be assigned an importance of "4" and **9 of the additional sites would be assigned an importance of "5"**). Based on the fact that 517 of 1117 inventoried fossil sites (46%) are part of these two queries, it may be extrapolated that 315 of the additional 684 fossil sites (46%) are also in the area of interest for these queries. This would bring the total to 999 fossil localities in the areas of interest.

EXTREMELY IMPORTANT PALEONTOLOGICAL SITES

The following fossil sites are extremely important because they represent the in-situ location of significant paleontological discoveries. In addition to the possibility of containing more undiscovered fossils that are associated with the originally collected specimens, these sites are important for the contextual data that they yield. Even when all of the fossils have been removed from the ground at these locations the geologic and physiographic context of the sites will contain important information to address future research questions.

(Query 2)

Ga0627 Centrosaur ("horned dinosaur") with additional associated crocodile fossils (Natural History Museum of Utah, catalog number UMNH.VP 9549). Published by Loewen et al., 2013.

<https://en.wikipedia.org/wiki/Centrosaurinae>

Ga0649 New Genus and Species: *Acristavus gagslarsoni*, Gates et al. 2011 (Natural History Museum of Utah, catalog number UMNH.VP 16607). Skull elements with associated hadrosaur bone. Assigned paratype specimen alongside Museum of the Rockies holotype specimen MOR 1155 from the Two-Medicine Formation in Teton County, Montana. This is a form of "duck-billed dinosaur".

<https://en.wikipedia.org/wiki/Acristavus>

Ka2334 Nodosaur ("armored dinosaur"). Natural History Museum of Utah catalog number UMNH.VP 22080. Collected under BLM permit UT07-23S.

<https://en.wikipedia.org/wiki/Nodosauridae>

(Query 3)

Ga0002 *Parasaurolophus* (crested "duckbill" dinosaur). Brigham Young University Museum of Paleontology catalog number BYU 2467.

<https://en.wikipedia.org/wiki/Parasaurolophus>

Ga0846 Two skeletons: Hadrosaur ("duck billed dinosaur") and Ceratopsian ("horned dinosaur"). Fossils discovered and reported, but not collected. Need to return with field crew to assess and collect.

Ga1595 *Deinosuchus* ("super-croc"). The second, and by far the most complete, specimen found in Utah. 38 field jackets were collected in 2014. Currently undergoing preparation and curation at the Denver Museum of Nature and Science. Collected under BLM permit UT11-10S-GS.
<https://en.wikipedia.org/wiki/Deinosuchus>