

Derek Sikes <dssikes@alaska.edu>

Borrowed Denali slug

Bowser, Matt <matt_bowser@fws.gov>

Wed, Mar 29, 2017 at 11:23 AM

To: Derek Sikes <dssikes@alaska.edu>

Cc: "ahaberski ." <ahaberski@gmail.com>, "Schade, Jacquelyn J (DNR)" <jacquelyn.schade@alaska.gov>, "Knight, Curtis A (DNR)" <curtis.knight@alaska.gov>

Dear Derek,

I had examined the Denali slug that I had borrowed, the larger of which was unfamiliar to me (http://arctos.database.museum/guid/UAM:Ento:338929). It looks to me like a *Prophysaon* just based on gestalt/general appearance, but I did not know what it was. I did not dissect the specimen to examine internal genitalia. I did take a small tissue sample from the animal's side and sent it off for COI sequencing via LifeScanner, yielding a 633 bp sequence, which I received access to today (attached). The BOLD specimen page is not available yet, but it should be public before long.

The sequence has no close match on BOLD or GenBank, the closest at about 85% similarity (BOLD TaxonID Tree attached). This could be the Alaska endemic *Prophysaon boreale*, known from Attu, southwestern Alaska, and possibly southeast Alaska. *Prophysaon boreale* is not currently represented on BOLD. Alternatively, it could be something else. We should contact a real slug expert as I know little more than how to recognize the three common species of slugs from my area. Jacquelin Schade or some of the CES folks may have suggestions as to experts we might contact.

I will return the specimen to you soon. It was not unique, though. You had at least several of them represented in the material from Denali. It appeared to me that you had in the Denali material the common, widespread *Deroceras laeve* and this one that might be a *Prophysaon*.

Potentially related article on *Prophysaon* in the Pacific Northwest: http://dx.doi.org/10.1111/j.1365-294X.2004.02234.x

Sincerely,

Matt

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2 attachments

UAM-Ento-338929_BOLD_TaxonID_Tree_2017-03-29-1036.pdf 10K

UAM-Ento-338929_COI.fas

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