

RATE MY LAND (RML) ASSESSMENT
INVERTEBRATE DIVERSITY INDEX REPORTING FORM
To be completed and signed by a biological consultant

Category

Score

1a. Arthropod orders included in property inventory _____

Aquatic or terrestrial?

1b. Number of families recorded _____

1c. Number of genera recorded _____

1d. Number of species recorded _____

_____/75

1e. Survey methodology

Survey methods: _____

Microhabitats surveyed: _____

_____/5

1f. Estimation of sampling effort applied

One survey period = 1 pt. Estimated hours: _____

Two survey periods = 5 pts. Estimated hours: _____

Three survey periods = 10 pts. Estimated hours: _____

Multiple (>3) survey periods = 15 pts. Estimated hours: _____

Subtract one half point for each survey with unfavorable weather (wind/precipitation)

_____/15

2. Indicators of habitat/environmental quality

-5 _____ 5

Poor Quality No Clear Indication High Quality _____/5

3. Species of special concern

Add one point for every federal or state listed species _____

TOTAL SCORE _____/100

Company Name:

Consultant signature:

Company contact—email: _____ Phone _____

Please return completed form with any accompanying information to:

Email: ratemyland@gmail.com OR Mail: Information Manager, Rate My Land, 1331 Atkins Rd., Petoskey, MI 49770

INVERTEBRATE DIVERSITY INDEX REPORTING FORM INSTRUCTIONS FOR CONSULTANTS

1. Species richness assessment

1a. List the Arthropod order(s) inventoried on the property. Rate My Land will compare properties that were surveyed for the same orders.

1b., 1c., 1d. Keep a list of all the species or upper level taxa encountered over the entire project. You can fill in just one of these or any for which you have data.

- More points will be awarded for species level identification to encourage the collection of data crucial for conserving biodiversity.
- The initial landowners and consultants to work with RML will help RML define and create the ranking system to be used for this index (how to normalize to 75).
- Through the website, Rate My Land will communicate to the landowners that an Invertebrate Diversity Assessment will be given an initial score to be reported on the website, but that scores can't be adequately compared or ranked until more RML Invertebrate Assessments in their region are compiled.

1e. There are several methods for capturing and/or observing arthropods; certain techniques are better for some orders and families than others. Rate My Land will assign up to five points after evaluating a project's survey methodology.

- Multiple sampling techniques are encouraged to overcome sampling biases. More points will be rewarded for using a diverse sampling regime.
- More points will be rewarded for exploring more microhabitats within a property.

1f. The sampling effort metric attempts to standardize sampling efforts, not for scientific comparisons, but to give RML rankings more legitimacy. This estimation allows for a customer (private landowner) to be able to receive an assessment at a lower cost (fewer field visits), but rewards a more thorough assessment.

- A survey period is a site visit or one use of traps during a season (i.e. traps could be out for a few days but it is still one sampling event during the season)
- Include a record of the person hours spent surveying.

2. Indicators of habitat/environmental quality (arthropod conservatism values): This metric attempts to award points for the observation of certain species/taxa that are often indicators of high quality habitat, high environmental quality, or are taxa often representative of the natural communities found on the property. It also provides an opportunity to deduct points for a predominance of non-native (could be invasive) arthropods, taxa that are indicators of poor environmental conditions, or a predominance of generalist taxa.

- Utilize the literature to determine species that are representative of a particular natural community type or high environmental quality.
- Consult local or regional invasive species lists for arthropod invaders.
- Give a score based on the overall picture displayed by the data, subtracting up to five points or adding up to five points.

3. Rare Species: This metric brings special attention and RML value to species of conservation concern.