## Natural Communities Summary



BioFinder 4.0 2023

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### **Natural Communities**

A natural community is an interacting assemblage of plants and animals, their physical environment, and the natural processes that affect them. As these assemblages of plants and animals repeat across the landscape wherever similar environmental conditions exist, it is possible to describe these repeating assemblages as natural community types. While they are named for plants that are common there, natural communities encompass the full interaction of plants, animals, soils, bedrock, and ecological processes.

#### Why is it Important?

Natural communities are one of the most important "coarse filters" for conserving biological diversity. This is because there are relatively few natural community types—97 in Vermont— compared to the tens of thousands of plant and animal species. Collectively, these 97 types in Vermont encompass the full range of described habitat conditions that native flora and fauna evolved with and are adapted to. Therefore, conserving high-quality examples of all the natural community types is an efficient way to conserve most species.

Natural Communities often occur in smaller patches like a few-acre wetland, but could occur over a large area, like a Northern Hardwood Forest of beech, birch and maple. Since these are often smaller than a habitat block, it is easier to assess their rarity and ecological importance.

Natural communities are relatively stable in a human timeframe, but their species assemblages have changed over thousands of years and will continue to shift in response to a changing climate. Sites with high-quality natural communities today represent places that are expected to continue to support important natural communities, and associated species, into the future.

#### How was it made?

This dataset was first created in 2015 for use in BioFinder and Vermont Conservation Design and was updated for the 2023 version to include the newest records, but used the same methodology as in the previous version.

The Vermont Fish & Wildlife Department maintains the Natural Heritage database of rare, threatened, & endangered species and significant natural communities. The Natural Communities component is a subset of the larger Heritage database. These include all known of Critically imperiled and imperiled (S1 and S2) natural communities, as well as 50% of vulnerable (S3), apparently secure (S4) and secure (S5) types distributed across biophysical regions in which they occur and within an intact and connected natural landscape whenever possible.

*Highest Priority* Natural Communities are ranked as rare (i.e. they are a subset of the Heritage database with an S1, S2 or S3 ranking) while *Priority* Natural Communities are S4 and S5 natural communities.

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To get more technical information about the Natural Communities Component, see the see the <u>2023</u> <u>Technical Abstract</u>