



Wisconsin Master Naturalist Community

KEY CONCEPT

Master Naturalists are trained individuals contributing to a network of projects and organizations focused on keeping Wisconsin's natural world healthy.

- The Wisconsin Master Naturalist program promotes awareness, understanding, and stewardship of the state's natural world and supports a network of well-informed instructors and volunteers dedicated to service within their communities.
- The Master Naturalist Training provided by instructors and guest experts is reinforced by the Training Guide and Training Project to help participants prepare for volunteer service.
- Master Naturalists are part of a community of people and organizations that are making a difference. Master Naturalists are life-long learners who contribute annual volunteer service and are recognized for their commitment and service milestones.
- The Wisconsin Master Naturalist Portal helps Master Naturalists maintain their records, provides many resources, and posts listings of training and volunteer opportunities. Logging volunteer service and additional training hours are essential to the continued success of the Master Naturalist program.



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Master Naturalist Service

KEY CONCEPT

Volunteer service by Wisconsin Master Naturalists happens through community education, citizen science, and stewardship and supports a variety of organizations.

- Master Naturalists as Educators—Education helps foster awareness and interest in Wisconsin’s natural world. Meaningful educational experiences have a theme, are well-organized, tailored to the audience, and can occur through many techniques. This carefully planned sequence of activities builds knowledge and excite participants about the natural world.
- Master Naturalists as Scientists—Citizen science provides opportunities for community members to contribute to inventories, monitoring, and research of our natural world by making and sharing observations, often through established and larger scale projects.
- Master Naturalists as Caretakers—Land stewardship is an important part of land management for conservation and recreation throughout Wisconsin.
- Wisconsin Master Naturalists provide and report a minimum of 40 hours of volunteer service and 8 hours of additional training annually to maintain certification as Master Naturalists and to show the collective impact of Master Naturalists across the state.



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Aquatic Life

KEY CONCEPT

Aquatic plants and animals are adapted to survive and prosper in the unique conditions of Wisconsin's waters.

- Food webs in Wisconsin's aquatic habitats are fundamentally the same as food webs on dry land but have uniqueness due to the aquatic environment.
- The presence and abundance of aquatic organisms can indicate the health of their habitat.
- There are threats to Wisconsin's aquatic life and biodiversity.



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Ecology

KEY CONCEPT

Ecology is the study of the distribution and abundance of organisms, and their relationships with one another and their physical environment. Understanding Wisconsin's ecology helps us discover and appreciate the complex network of relationships in our natural world.

- Ecology involves studying both the biotic and abiotic components of the environment.
- Energy begins with the Sun and passes through organisms within an ecosystem.
- Traditional Ecological Knowledge refers to the evolving knowledge acquired by Indigenous and local peoples over hundreds or thousands of years through direct contact with the environment. It is most often shared by individuals entrusted with its care through languages, stories, ceremonies, and songs.
- Biodiversity is needed for a resilient and healthy ecological community.



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Geology

KEY CONCEPT

The landscapes of Wisconsin are the results of both climatic and geologic forces, which determine the plant and animal communities found here.

- Geological history has formed the landscapes of Wisconsin.
- Landscapes are shaped by the past and present climate (moisture, temperature, and seasonal change).
- Water has sculpted, and continues to sculpt, the Earth's surface.



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Human Connections

KEY CONCEPT

Humans are an integral part of the ecology of Wisconsin and the overall health and well-being of society is connected to nature.

- A healthy environment is needed for Wisconsin to be a sustainable state.
- History in what is now called Wisconsin reflects a diversity of cultures and ways of life that tie to our land and waters.
- Human-driven land uses have and continue to shape Wisconsin's natural world.
- Connecting with nature can benefit our overall well-being, including physical and mental health.
- People, individually as well as collectively, have the power to positively change our natural environment.



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Natural History

KEY CONCEPT

The study of natural history creates an order of Wisconsin's natural world that includes species classification and mapping the landscape.

- Natural history is the scientific study of the natural world using a variety of disciplines.
- Scientific names follow an important classification structure and identifying species based on this classification by using a dichotomous key is an important skill.
- Wisconsin is composed of several ecological landscapes, each with characteristic plant and animal communities.



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Plant Communities

KEY CONCEPT

Local geography, geology, climate, natural disturbance patterns, land management, and a variety of human influences have created and shaped the plant communities in Wisconsin.

- Change within plant communities is driven by both natural and human influences.
- The factors that create the different plant communities (prairies, wetlands, and forests) in Wisconsin include ecological processes and human land use, such as disturbance and succession, available moisture, and soil type.
- Nonnative and invasive plant species have a negative impact on natural communities.
- Management techniques, including timber practices and prescribed burns, are used to maintain healthy plant communities in Wisconsin.



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Water

KEY CONCEPT

Wisconsin is a water-rich state with dynamic features, above and below the land, including Great Lakes, streams, rivers, lakes, wetlands, and groundwater.

- Water moving across the land (rivers), settling above land (lakes and wetlands), and seeping through soil and rocks underground (groundwater) greatly impacts Wisconsin's natural communities and built environments.
- Glacial activity and the topography it created, physical processes such as erosion, and the weather and climate together create the wetlands, lakes, and rivers we see in Wisconsin today.
- There are a variety of lake and wetland types found throughout Wisconsin that serve important roles.
- Streams and rivers are dynamic entities with changing flows, seasonality, water chemistry, and water quality.



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Weather & Climate

KEY CONCEPT

Wisconsin experiences a dynamic climate that influences a wide range of conditions in our state, including our vegetation, rivers, wildlife, and human residents.

- Wisconsin's weather varies seasonally and from year to year and has been experiencing long-term changes due to a changing climate.
- Understanding how our climate varies, and what changes we might expect in the future, is important for identifying potential impacts to our state.
- Weather and climate monitoring by Master Naturalists can help by providing data to scientists.



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Wildlife

KEY CONCEPT

Wisconsin's wildlife is diverse in many ways, including the number of species and their distribution, abundance, and adaptations. Each species has been shaped by evolutionary response to Wisconsin habitats.

- Wildlife includes four groups of terrestrial vertebrate taxa (birds, mammals, reptiles, and amphibians).
- Physical and behavioral adaptations, developed over time, allow each species to thrive in its preferred habitat.
- Habitat includes four components: food, water, cover (shelter), and space. Species, including humans, interact with all components of their habitat.
- There are many techniques used to actively manage habitats in order to influence wildlife populations of game, nongame, threatened, and endangered species.
- Most wildlife species are protected under local, state, and/or federal laws.



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