**Preface, A Bog's Life, July 2023**

I have always enjoyed water. Creeks, brooks, streams, rivers, ponds, lakes, bays, seas, oceans, and waterfalls provide a playground for exploring, fishing, and swimming. Bogs are a special place all of their own.

Bogs are unique natural features in New England. A bog is an ecosystem in a continuous process of change, rich in flora and fauna. Depending upon where you live and your family's heritage, a peatland and bog may also be called a fen, heath, mire, moor, muskeg, quagmire, pocosin, or maybe even a spong.

Bogs, fens, and peatlands share common features of containing layers of decayed and decaying plant materials known as peat. For simplicity throughout this book, these wetlands will generally be called bogs. Such a general term for a bog may be far too encompassing. Note that a wide variety of wetlands are defined and characterized throughout the book. I realize that many wetland ecologists and scientists may wrinkle their noses and decry such a broad characterization. My intent is simplicity; my goal is to share interest, knowledge, and the joy of outdoors.

Basic definitions used throughout this book are:

- Bog: no nutrient inflow or outflow except for rainwater: a nutrient poor, isolated wetland with peat as the substrate. Water is usually cold, stagnant, low in oxygen, highly acidic, and brown in color. Common physical structures are kettle hole and quaking bogs.
- Fen: a wetland with a substrate of peat with some type of nutrient inflow and outflow. Water flows through a fen carrying mineral soils. Fens are not as nutrient poor as bogs because the water is more oxygenated and less acidic. This creates a more fertile peatland with greater plant diversity.
- Peat: a thick deposit of organic matter created when dead plant remains accumulate faster than they decay, especially mosses of the genus *Sphagnum.*
- Peatland: includes both bogs and fens with differing names in different locales such as heath in Maine, muskeg in Canada, and mire/moor in Europe.

Kettle holes and quaking bogs provide distinct habitats. A kettle hole is formed when a ground depression is created from large blocks of ice left by retreating glaciers. As the ice melts, it creates a pond or lake dammed by glacial debris.

A quaking bog has a peat layer that is wholly or partially floating. The peat mat can range from a few inches to more than 40 feet thick. The peat mat shakes or quakes as it floats, when it is touched, or walked upon.

I wrote this book so that others can be inspired and refreshed through visits to bogs, forests, and conservation lands. Chapter 1 describes bogs and wetlands in New England, their key flora and fauna, the most common ecosystems, and habitats. Chapter 2 discusses bog formulation, flora and fauna, and human interactions.

With these fundamentals, I venture through 37 bogs in five New England states. The appendices provide additional information, including locational maps and glossary. The bibliography provides important books and content for reference and further investigation. Pictures throughout the book are from New England bogs that I have visited, hiked, enjoyed, and photographed from May 2022 to July 2023.

**Section I: Bog Creation and Development**

The first chapter provides information to explain wetland composition and formation to understand the different types of bogs, fens, marshes, and swamps. In Chapter 1, flora and fauna are identified as well as five bog ecosystems/habitats: Black Spruce-Tamarack Bog, Dwarf Shrub Bog, Poor Fen, Medium Fen, and Open Peatland. Chapter 2 is a more detailed look at New England's bogs and their plants, birds, and history with people. Chapter titles are:

- Chapter 1: Bog Wetland Ecosystems and Habitats
- Chapter 2: It's a Bogs Life

**Section II: Profiles and Hikes for New England Bogs**

Bogs in New England were created thousands of years ago by the Laurentide Ice Sheet during the Wisconsin Glaciation Period. They are not just places to visit but living environments, unique unto their own. Each supports a diverse habitat of flora and fauna within its waters, along its banks, and integrated with a larger watershed. They transcend time, being both patient and persistent.

Bog hike profiles in five New England states are provided. Each profile has information for directions, GPS location, trails, bog data with an overview and history, hiking highlights, and other places of nearby interest.

For the 37 hikes, the bogs were chosen for their accessibility to local roads, diversity of flora and fauna, and boardwalks and hiking trails that are established for all abilities and ages. Enjoy the special features of these unique habitats.

**Section III: Appendix and Bibliography**

A listing of the New England bogs, alphabetically by name and by state, is provided in Appendix A. The Glossary and Additional Information provides definitions and helpful information. The Bibliography has websites and favorite books that were used for researching this book.

<u>The Importance of All Persons Trails</u>

To encourage and improve exploration of conservation lands, preserves, and forests, trails are being built as universally accessible. A universally accessible trail is designed for everyone and intended for use by visitors of all abilities and backgrounds.

An All Persons Trail can feature a larger parking lot, benches, inclusive and informational signage, interpretive points of interest, and family-friendly, ADA-compliant portable restrooms.

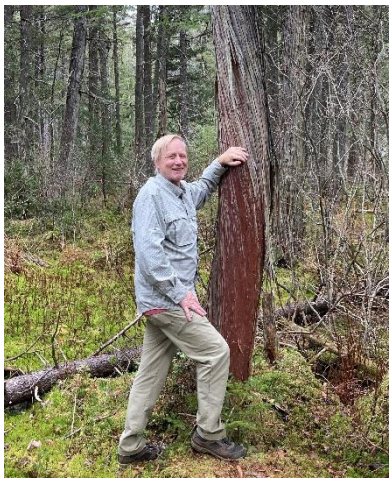
Across New England, many bogs have hiking paths that are designated as All Persons Trails or provide wheel chair access, such as:

- Connecticut: Cranberry Pond Bog and Little Pond, White Memorial Conservation Center (Litchfield)
- Maine: Ferry Beach State Park (Saco)
- Massachusetts: Bog at the Acton Arboretum (Acton); Pine Hole Bog, Wards Reservation (Andover)
- New Hampshire: Manchester Cedar Swamp (Manchester); Mud Pond, Pondicherry Wildlife Management Area (Jefferson); Spruce Hole Conservation Area and Oyster River Forest (Durham)
- Vermont: Esqua Bog (Hartland); Mollie Beattie Bog (Island Pond); Moose Bog (Ferdinand).

Experience bogs year-round.  And take heart: the acidity of bogs helps to keep mosquito numbers low by making the abundant standing water inhospitable to mosquito larvae. There will be ‘skeeters and other biting insects, but at least in lower numbers when compared with other types of open waters. An acidic bog has pH levels that range from low 3.0s to low 4.0s. Freshwater rivers, streams, ponds, and lakes in New England have pH levels slightly above or below 7.0, a balanced condition.

I hope that with this book you will be better able to understand and appreciate the diversity of our wetland environments and find New England’s outdoors more welcoming and intriguing. Enlighten others with a new respect and appreciation for our bountiful bogs.

And remember, a sleeping bog never quakes.



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