

Appendix 15

Methodology for Assessing Open Space for Protection

In summary, the Harpswell Conservation Commission considered the following types of areas as priorities for preservation for Open Space.

1. Areas with Water Resources

- Freshwater wetlands which protect our drinking water and marine environment
- Coastal wetlands which protect marine water quality provide flood control and act as part of the marine food chain.
- Ponds
- Streams
- Vernal pools
- Public landings or areas that provide access to the sea for recreation and commercial fishing

2. Areas with Natural Resources

- Coastal and freshwater wetlands provide wildlife habitat for plants, animals and fish. Freshwater wetlands are essential habitat for many plants and animals. 70% of the commercial fish caught in Harpswell use coastal marshes at sometime in their lifecycle. Mudflats and eel grass beds provide vital habitat for a variety of marine animals, as well as, waterfowl and wading birds.
- Naturally-vegetated areas alongside our waterways (*shoreland, riparian zones, and buffers*) provide many benefits to aquatic ecosystems. These areas help filter out storm water pollutants (e.g., eroded soil, fertilizer, and pesticides) before they reach waterways. Additionally, when trees and shrubs are present, riparian zones and buffers provide shade with their leaves, an interruption to the force of the wind and rain with their leaves, stream bank stability with their complex root systems, food for aquatic organisms such as insects and mollusks, diverse habitat structures and cover for aquatic organisms such as insects and fish and important habitats and travel corridors for many species of amphibians, birds, and mammals.
- Ponds and streams that provide habitat for fish and other aquatic and amphibian species.
- Clam flats and shellfish beds
- Forests
- Significant and essential habitat for rare/exemplary plants, endangered/threatened animals and high value waterfowl and wading birds.
- Large unfragmented blocks of land
- Focus areas of state-wide ecological significance

3. Areas with Recreational Resources

- Public landings and areas that offer access to the ocean for recreational boats and for swimming
- Trails
- Picnic and camping spots

- Hunting areas
- 4. Areas with Scenic Resources**
 - Roads and public land that offer scenic views
- 5. Areas with Cultural, Historic and Civic Resources**
 - Land that contributes to the character of the town and provides open space, such as school yards, athletic fields, cemeteries, historic sites and green areas.

Additional Factors

We also considered the following additional factors

- Limited or no current development in the area
- Size of the area with priority given to larger areas, including blocks of undeveloped land over 20 acres in size
- Connectivity of the land to existing preserved and undeveloped land or uninterrupted corridors for wildlife habitat
- Existence of conserved land in the area
- Equity in the distribution of open space within the town
- Public input

Harpowell Islands over one acre in size, are high value areas and therefore a priority for open space preservation. Island ecology is fragile by nature and easily destroyed so it is important that their natural areas are preserved because:

- The undeveloped areas provide important wildlife habitat for nesting seabirds, and animals with minimal human disturbance.
- Thirty of our islands have been identified by the Maine Dept of Inland Fisheries and Wildlife as important sea bird nesting islands and have been zoned for Resource Protection.
- The bald eagle and roseate tern, threatened species, nest on Harpswell Islands.
- Many are surrounded by healthy clam flats that benefit from their undeveloped state.
- They provide both a location for outdoor recreation and picturesque views from the mainland.