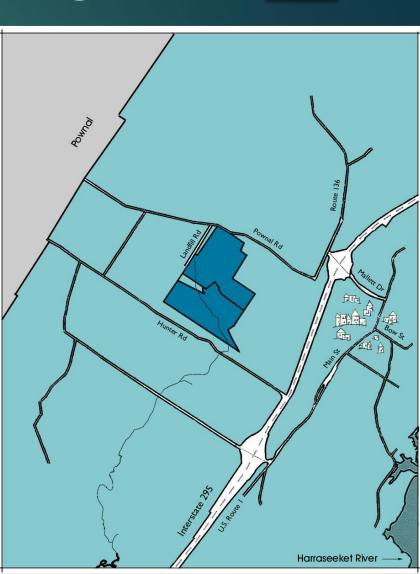
# Hedgehog Mountain Management Plan Update

JANUARY 2023



# Management Plan Background

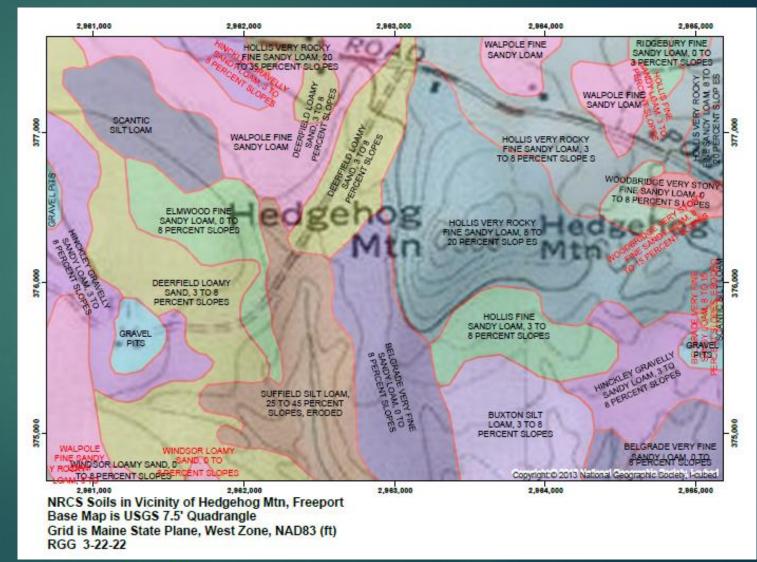
- Hedgehog Mountain is a 196-acre conservation property located near the Transfer Station purchased between 1989 – 2001 by Town of Freeport
- Significant natural resource with highest elevation in Freeport and the most popular public access property owned by the Town
  - Hiking, cross-country skiing, snowshoeing, hunting for shotgun and bow hunters only, fishing, horseback riding, mountain biking and wildlife observation are allowed.
- Last revision of the Management Plan was approved by the Town Council on 9/7/2004.
- The Hedgehog Mountain Management Plan includes background information, a description of the natural and cultural resources, rules for the property, and future management actions.
- Work started in early 2022 to update the Management Plan as required by the Conservation Commission Ordinance, which included the following research work:
  - Soil types and distribution around the summit of Hedgehog Mountain
  - Vegetation types and occurrence of any rare, threatened, or uncommon plants
  - ► Wildlife Habitat and Hunting
  - Management Threats and Challenges
  - Defining the "Summit Area" of the property
  - Designating allowed recreational uses on trails

# Management Plan Changes and Recommendation Highlights

- Defining the "Summit Area" of the property at 180 feet above sea level and higher
- Defining where mountain bikes, snowmobiles, and horses are allowed on the existing trail system
- Highlighting the management threats and challenges that the property faces, including:
  - Impacts of climate change
  - Invasive plants and pests
  - Maintenance and management capacity
  - Development and user pressure
- Update management actions, including:
  - Establish a comprehensive signage system, including trail signage, boundary markers, features of interest, information on hunting safety, and park rules.
  - Investigate options for acquiring adjacent lands and those necessary for possible connections to other public open spaces.

# Summit Area Designation

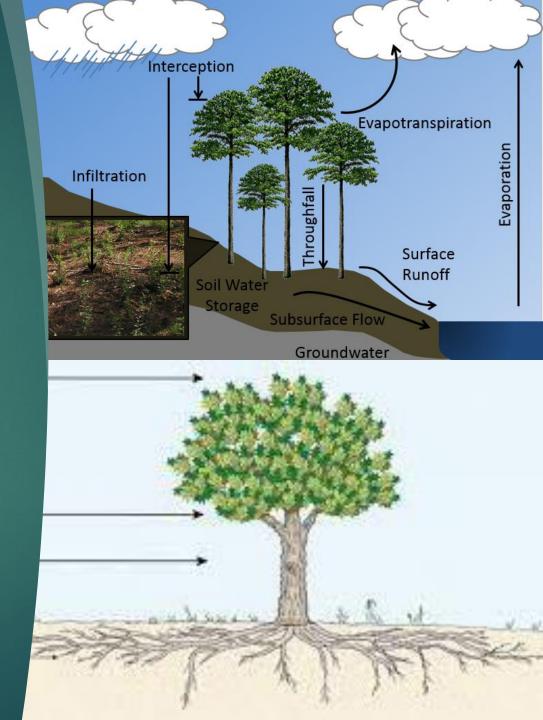
The new plan defines the "Summit Area" of the property between 180 feet above sea level and the summit of Hedgehog Mountain at 308 feet



# Soils

### What role do they play in the forest?

- Provide nutrients, store water, and provide the substrate and support for plants and trees
- Store more than 3x the carbon as trees and plants above ground and make up 75% of the carbon pool on land
- Soils on Summit Area are Hollis Rocky with steep 8-20% slopes, considered highly erodible by USDA
- Extremely thin soils a foot or less to bedrock
- Tallest canopy cover on the property is found in the Summit Area, meaning some of the most extensive root systems on the property are also found here
- Soils more prone to erosion, tree mortality, and runoff into watershed – erosion decreases productivity of forests by decreasing water available in the soil and loss of nutrients

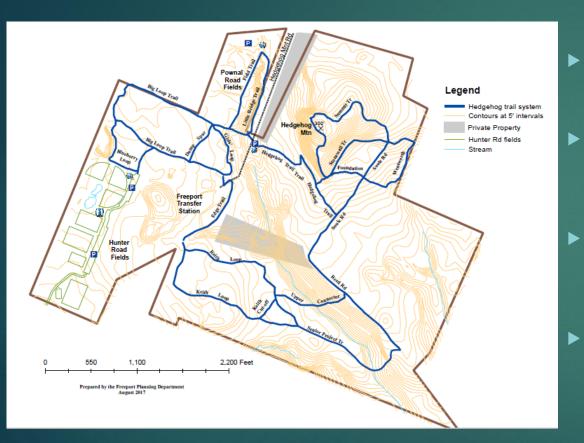




### Summit Area Designation Summary

- Thin and highly erodible soils found on clearly defined portions of the property near the summit where the tallest tree canopies on the property are found
- Conservation Commission ordinance prohibits "activities detrimental to drainage, erosion control or soil conservation...and requires that the Commission keep its property "predominantly in its natural, scenic or open condition" (Section 35-5)
- Botanical survey of summit area identified an uncommon sedge and a significant population of Leatherwood that does not regularly occur elsewhere in the state

# Trail Use Designations



- Hedgehog Trail leads from the parking lot and connects to the Summit Trail, Soule Road, and the Stone Wall Trail. Hiking, mountain biking, horseback riding, and cross-country skiing are allowed on this trail.
- **Summit Trail** extends from the Bridge/Hedgehog Trail, over the summit, to Soule Road. Only hiking is allowed on this trail due to highly erodible and thin soils.
- Wentworth Trail is a short loop accessible from Soule Road. Wentworth Trail is named after Paul Wentworth for his active involvement in trail building. Hiking, mountain biking, horseback riding, and crosscountry skiing are allowed on this trail.
- **Soule Road**, an abandoned road that runs north-south across the former Soule property, ends at Reed Road. Hiking, mountain biking, horseback riding, snowmobiling, and cross-country skiing are allowed on this trail.
- **Reed Road**, one of Freeport's abandoned range roads, runs from Hunter Road to the Freeport Transfer Station. The trail is not publicly accessible from either Hunter Road or the transfer station. Hiking, mountain biking, horseback riding, snowmobiling and cross-country skiing are allowed on this trail.
- Several loop trails extend through the former Keith property. Hiking, mountain biking, horseback riding, and cross-country skiing are allowed on these trails.

Internal Use

# Management Threats and Challenges

- Increasing presence of invasive plants and pests
- Impacts of climate change
- Limited volunteer capacity for trail and property maintenance
- Increasing development pressures highlight importance of undeveloped spaces in Freeport for cultural, natural, ecological and recreational purposes
  - Maine Department of Inland Fisheries and Wildlife highlighted importance of large undeveloped parcels, including Hedgehog, remaining open for hunting
  - Balance of public trails is important to maintain undeveloped areas for wildlife habitat and plant communities



## Management Actions

The following actions will govern the future management of Hedgehog Mountain:

- 1. Establish a comprehensive signage system, including trail signage, boundary markers, features of interest, and information on hunting safety, and park rules.
- > 2. Maintain trails for safe use and to correct and minimize erosion potential.
- ▶ 3. Maintain the natural character of the summit and the views that it affords.
- ▶ 4. Preserve the ecologic, historic, and archaeological features of the property.
- 5. Enhance wildlife habitat and forest health through sustainable forestry practices.
- ▶ 6. Encourage pet walkers to carry out waste.
- 7. Investigate options for acquiring adjacent lands and those necessary for possible connections to other public open spaces.
- ▶ 8. Pursue obtaining access to Hedgehog Mountain from Hunter Road and parking for 4-6 cars.
- 9. Engage local citizens and identify a core group of volunteers to help maintain trails, act as stewards, and guide nature walks.
- 10. Monitor the site regularly for the presence of invasive species and implement control techniques when necessary.
- 11. Encourage hunters to use safe hunting practices. Urge visitors to be aware of hunters and to wear blaze orange during hunting season.
- ▶ 12. Encourage users to respect property boundaries.

#### Internal Use