

Conserved Land in Down East Maine: Have We Saved All the Parts?



**Landscape Level Conservation in Down East Maine
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Conserved Land in Down East Maine: Have We Saved All the Parts?

Topics to be Covered:

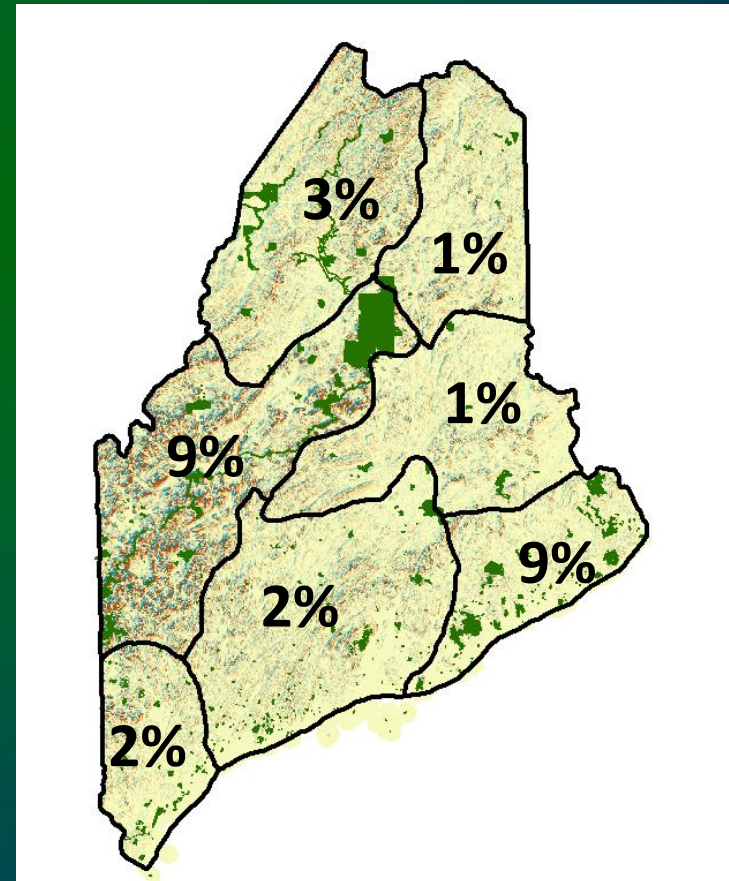
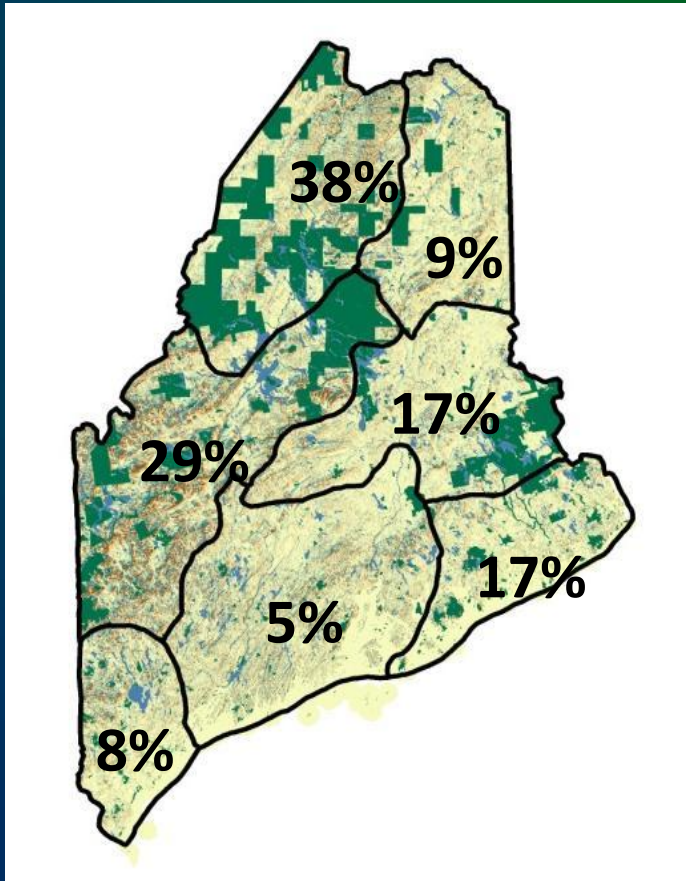
- Conserved Land -- How Much is Enough?
- What's in the Conservation Portfolio for Down East Maine?
- What's Missing?
- Take Home Messages & Discussion Points



Conserved Land in Maine: How Much is Enough?

All Conserved Land: 19.5%

All 'Reserved' Land: 3.9%



The question is not just *how much* have we conserved, but *what* have we conserved?



"To keep every cog and wheel is the first precaution of intelligent tinkering." - Aldo Leopold

Ecological priorities for conservation:

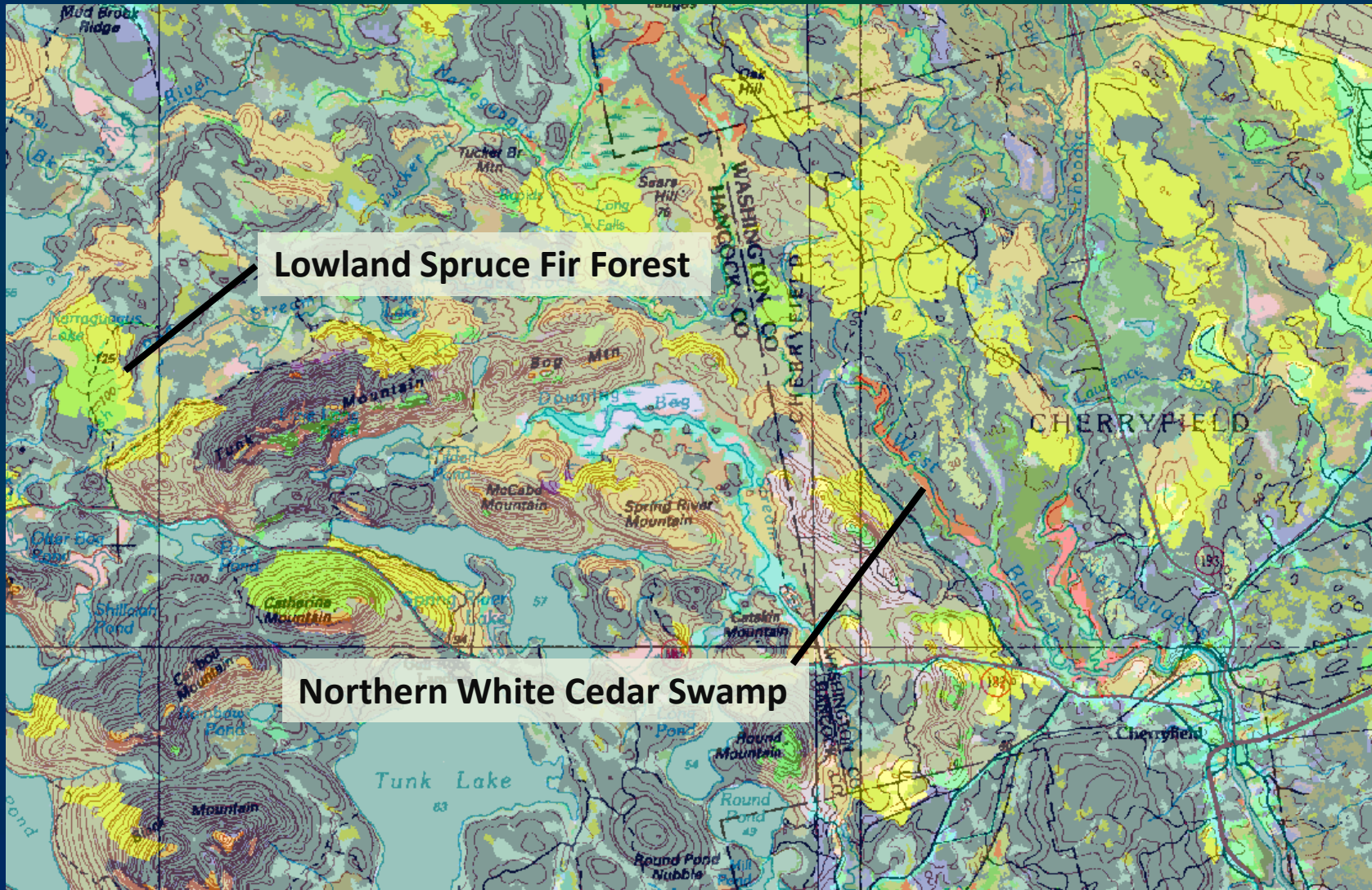
- ❖ Landscape scale working forests (size & connectivity)
- ❖ 'Umbrella' habitats like Deer Wintering Areas & Intact Riparian/Aquatic Systems
- ❖ Rare natural communities
- ❖ Rare species
- ❖ **Habitat types that are poorly represented on conserved lands – what are we missing?**
- ❖ **Old Forests**



What does it mean for a habitat to be 'adequately represented' in conserved land?

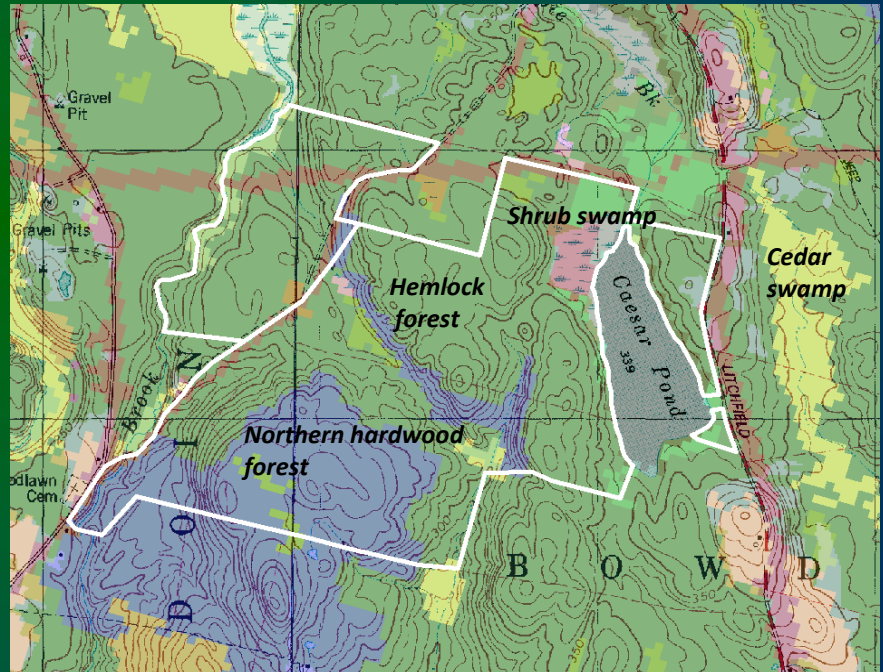
- Amount of habitat type in conserved land is comparable to proportion of that habitat type within the overall landscape
- Minimum of two sites for each habitat type in each ecoregion (redundancy)
- Minimum acreage threshold

Ecological Systems (TNC & NatureServe)



How well are Maine's various habitat types represented on our conservation lands?

- Use Ecological Systems (TNC)
- Overlaid with 2 types of conserved land ('reserve' and working forest)
- Assessed for 7 Maine ecoregions



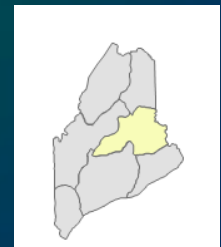
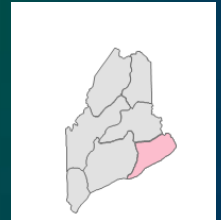
Representation Analysis: Some Initial Results

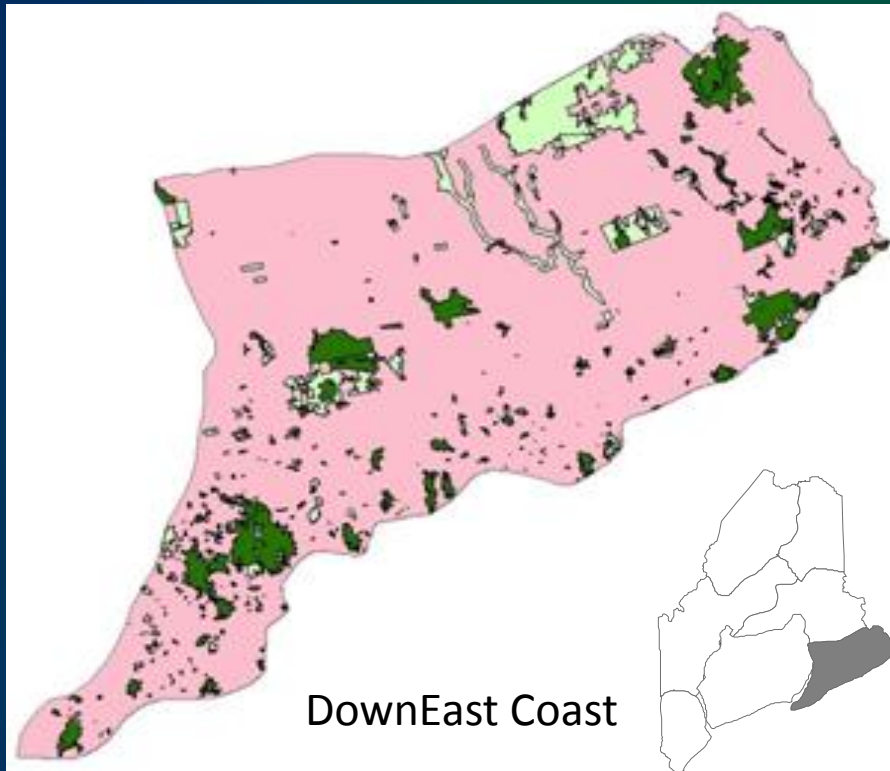
- Statewide, wetlands are *twice as abundant* within conserved lands; in Down East Maine, wetlands are proportionally represented



The Good News:

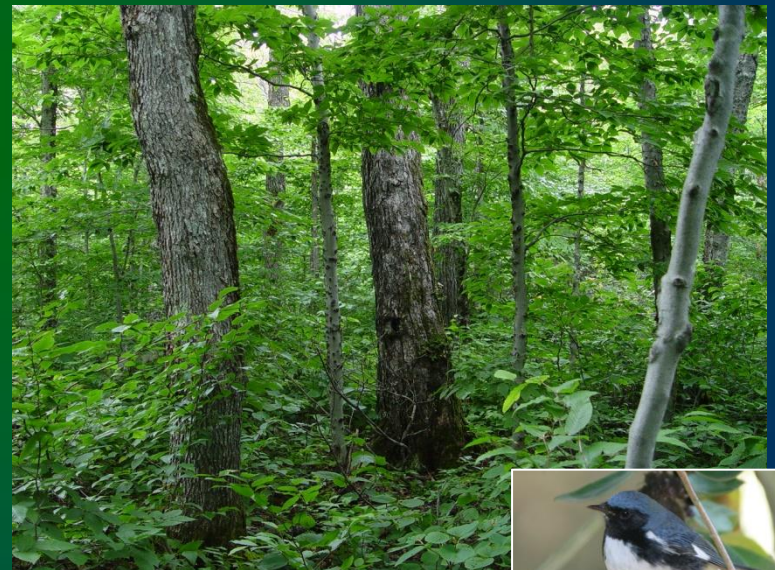
- Each of 17 habitat types in Down East Maine occurs within conserved lands at least once
- Each of 14 habitat types in the Eastern Lowlands occurs within conserved lands at least once



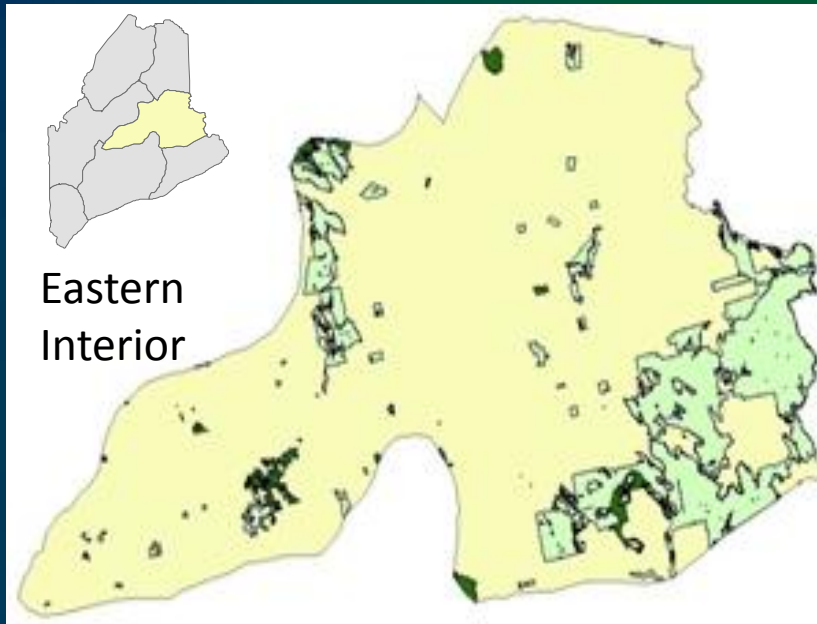


What's Missing?

- Northern Hardwood Forest

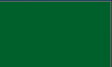
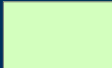


	Reserved Land	8.9%
	Other Conserved Land	8.4%



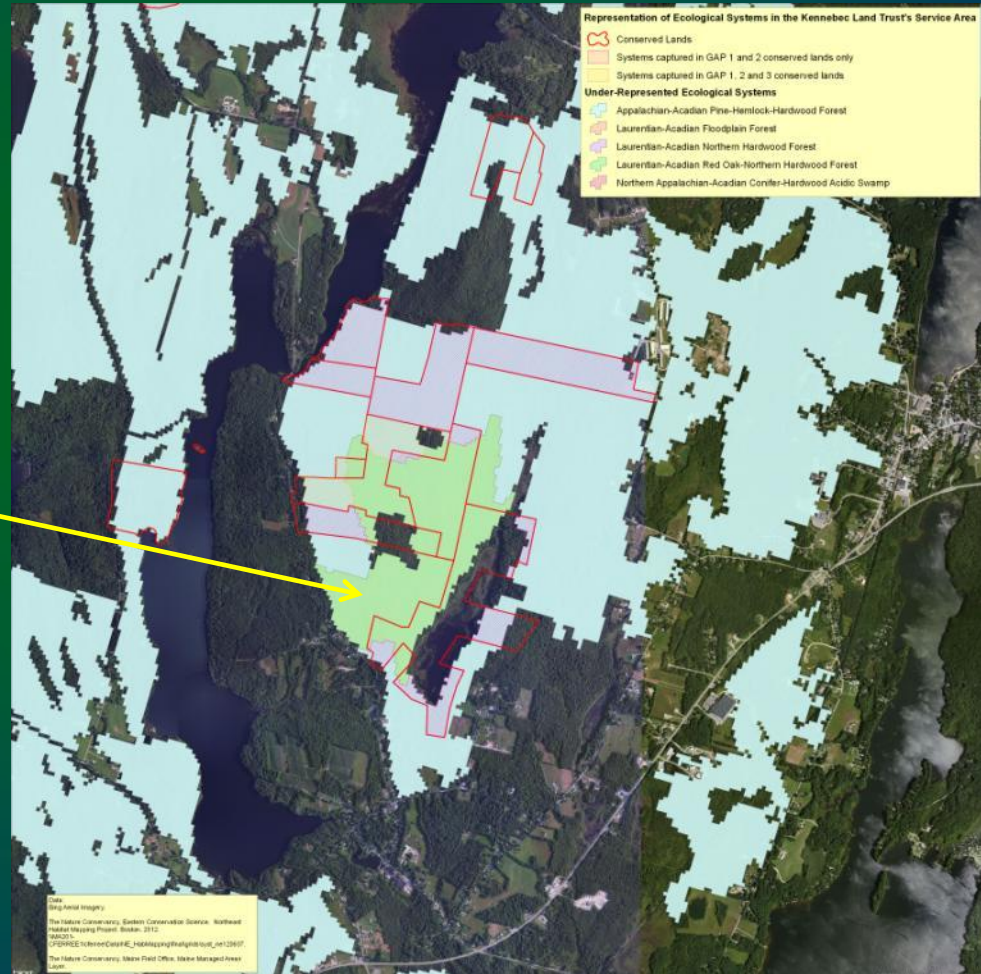
What's Missing?

- **3 Forest Types within 'Reserved' Lands**
 - Lowland spruce – fir
 - Spruce flats
 - Northern hardwoods

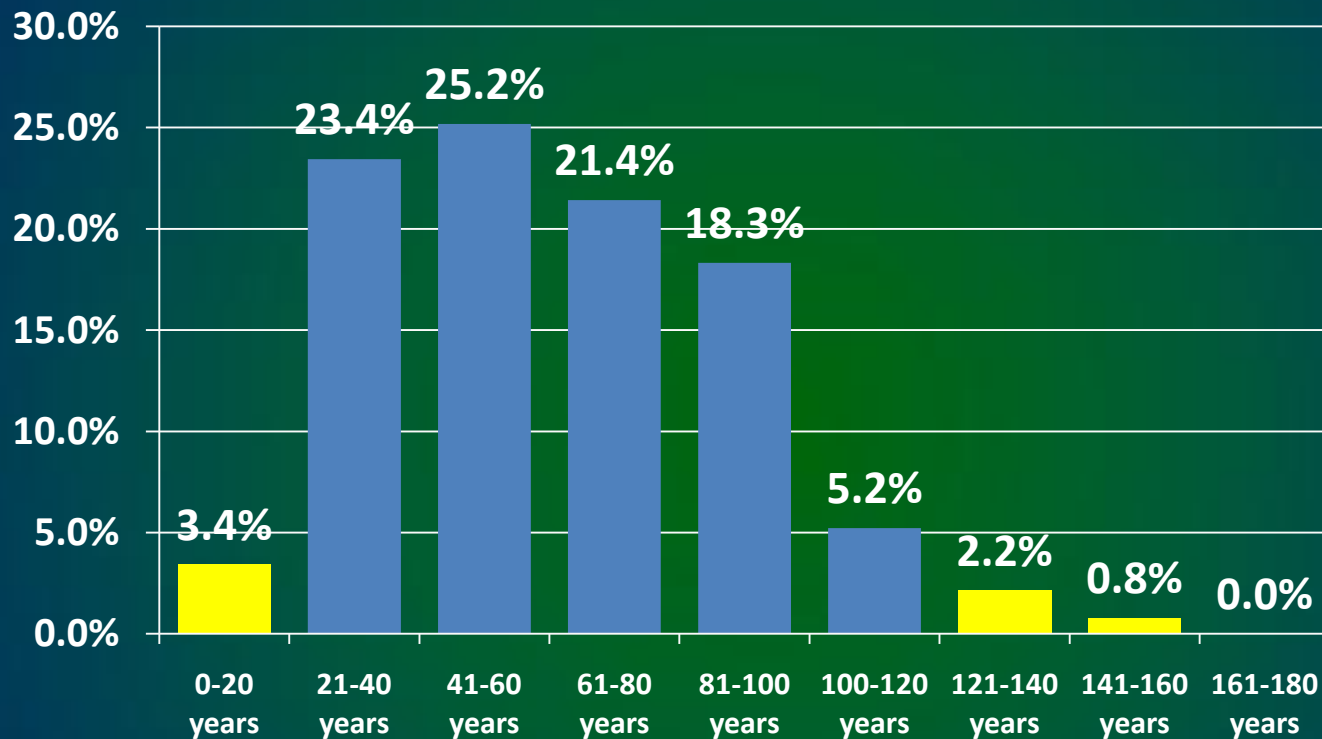
	Reserved Land	1.2%
	Other Conserved Land	15.5%

Representation Analysis: Implications for Local Conservation

Northern Hardwood
Forest; under-
represented in
region (or in land
trust service area)



Forest Age in Down East Maine



In Maine's most recent forest inventory, no stands in the Down East region were over 160 years old, and only 3% were over 120 years old

Old Forest – Why Should We Care?

- Uncommon and declining across the region.
- “The loss of older forest age classes in landscapes managed primarily for wood is a major threat to forest biodiversity” (*Manomet 2004*)
- In Finland, where <0.5% of the forest is old growth, extinction-vulnerable old forest species now number > 1000 (*Manomet 2007*)



Take Home Messages

- It's not just how much has been conserved, it's what has been conserved.
- GIS and new statewide data sources can be used to inform our conservation priorities and actions.
- Land protection efforts have been very effective for tidal marshes, wetlands, mountaintops, and some common forest types.
- Some upland forest types remain poorly represented on conserved lands – particularly 'reserved' lands.

Discussion Points

- Do conservation practitioners have access to the most updated ecological information? Access to GIS services?
- Should greater weight be given to tidal marshes and adjacent lowlands, in light of projections regarding sea level rise?
- How do you weigh ecological factors with social, economic, recreational, etc.?