



Terrestrial – Wetland Subteam Update Connecticut River Watershed Pilot

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(filling in for Randy this month)

July 25, 2014

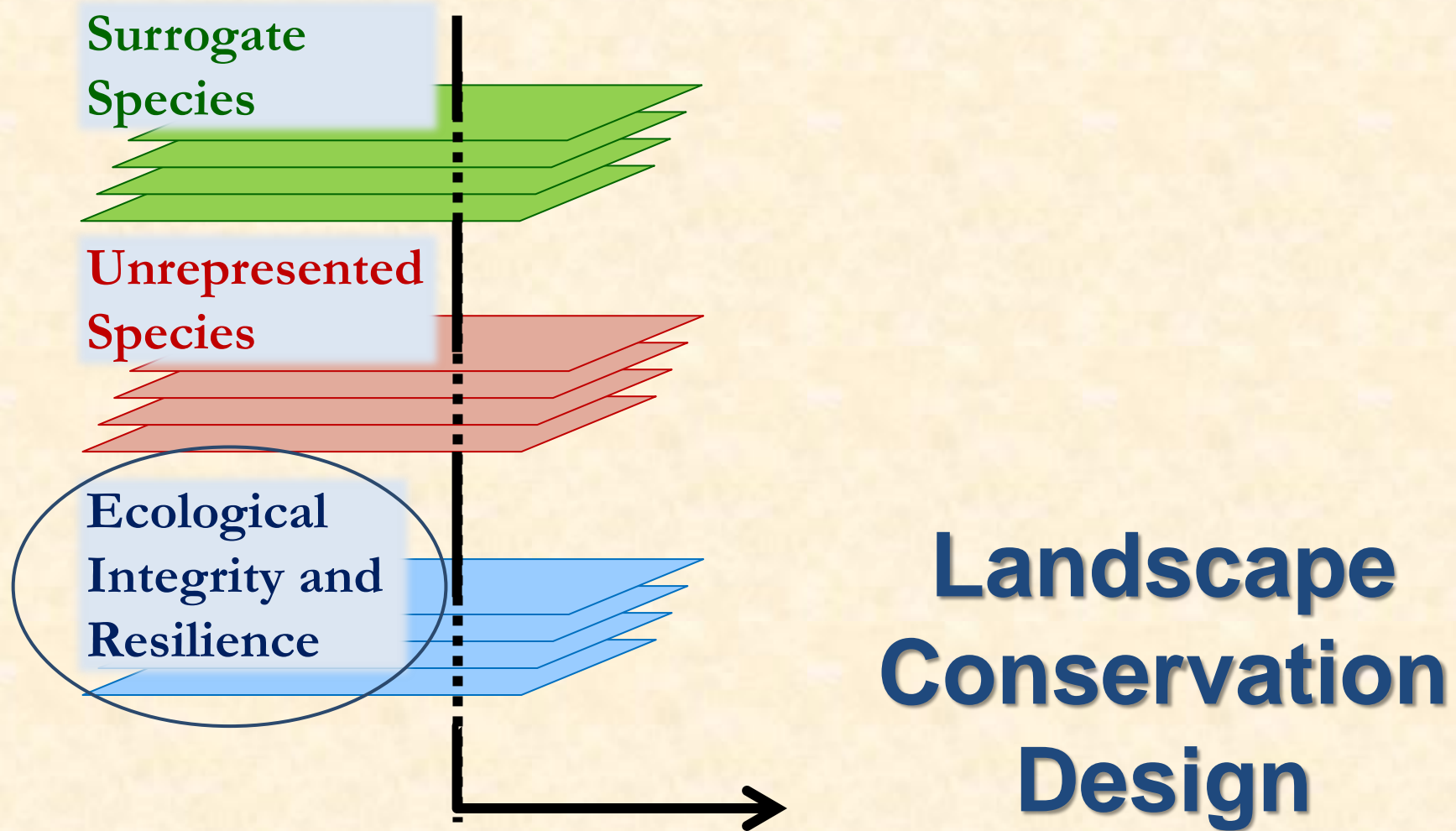


North Atlantic  Landscape Conservation Cooperative



Landscape Conservation Design

Integrating the Elements



Key Decision Points from June Core Team Meeting

Landscape Conservation Design

Step 2: Design Conservation Network

Key Decisions:

1. Terrestrial buffer-core area selection and delineation
 - a) Slice or algorithmic approach?
 - b) Size and configuration (min size; fewer larger vs more smaller)?
 - c) Spread barriers?
 - d) CTR vs HUC8 (or other) scaling?
2. Aquatic buffer-core area selection and delineation
 - a) What spatial units to use?
 - b) What method for delineating buffers?
3. How much area to allocate to buffer-cores?
4. What's the best way to display the results?



Our Conservation Goals for the Watershed

1. The Connecticut River watershed sustains a diverse suite of intact, connected, and resilient ecosystems that provide important ecological functions and services that benefit society, such as clean water, flood protection, and lands for farming, forestry and recreation
2. The Connecticut River watershed sustains healthy and diverse populations of fish, wildlife, and plant species for the continued benefit and enjoyment of the public



Suggested more detailed ecosystem objectives (part 1 – fundamental objectives)

1. Ensure the existence of a spectrum of ecosystems that encompasses a full range of biodiversity (genetic, species, and natural community) and supports a multitude of ecosystem functions and services.
2. Ensure that ecosystems are of a size and condition, and situated in a landscape context, that will preserve their long-term resilience.
3. Maintain ecosystems in a well-distributed, interconnected network that 1) facilitates short-term movements and long-term range shifts of a diversity of both aquatic and terrestrial species and 2) allows ecological processes such as aquatic flows to operate at large scales.

Suggested more detailed ecosystem objectives (part 2 – means objectives)

1. The conservation design will depict areas of the highest priority (“core areas”) that can be considered the most important locations for achieving the fundamental objectives (best or most urgent places to start). However, by themselves they are unlikely to be sufficient to fully achieve the objectives.
2. The conservation design will also depict additional tiers of priority, including priority connections areas or corridors, that collectively contribute to the fundamental objectives.
3. The conservation design will include priorities for management and restoration that over time can enhance ecological value and improve natural processes that link ecosystems.

Terrestrial / wetland meeting

- Teleconference Tuesday, June 22
- 10 participants
- Pre-meeting document, meeting notes on subteam webpage

Discussion:

How Much Area in Core Areas?

- Discussed possible criteria (e.g., species habitat range size; # of patches) rather than arbitrary %, but no firm conclusions
- More and larger core areas generally preferred – e.g., 30% of landscape
 - more conservation opportunities
 - more practical management scale
 - more cohesive, functional units

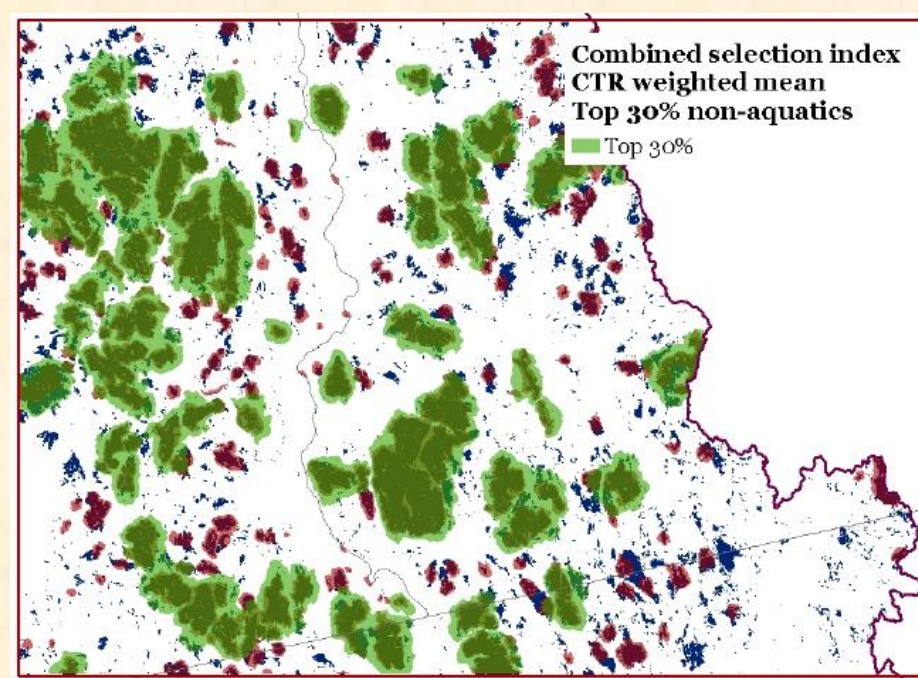
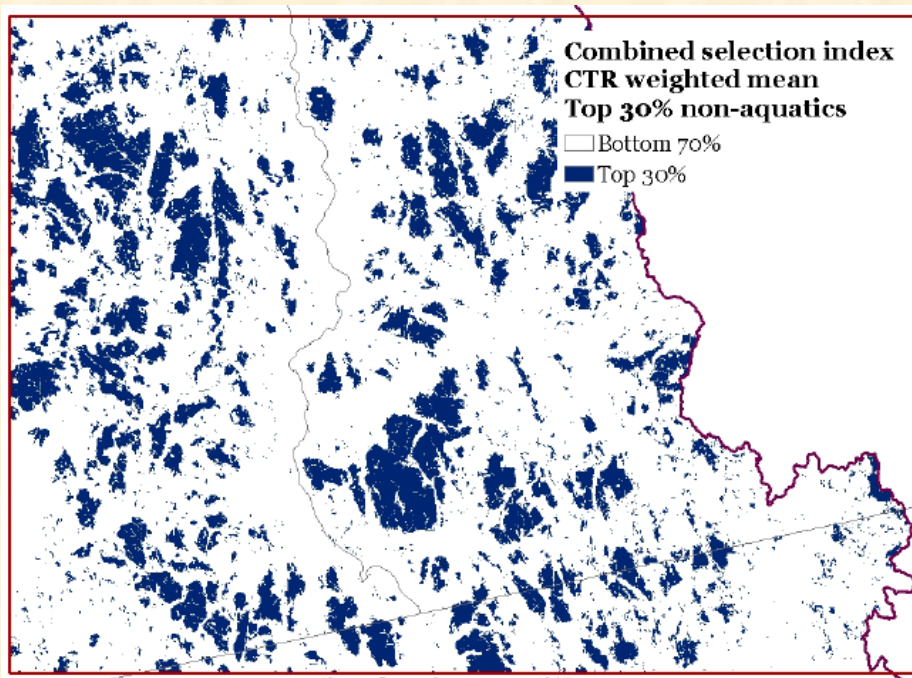
Discussion: more, smaller core areas or fewer, larger core areas?

- General preference for larger core areas (but, look at results)
- Similarly, “slivers” of core areas generally to be avoided (lack of ecological functioning, impractical for management)
- Possible size minimum threshold (e.g., NH has used 10 – 100 acres)

In other words, “algorithmic” preferred to “slice”

“Slice” – top x% of
index

“Algorithmic” grow
out core areas



Discussion: scale by sub-areas to increase geographical representation?

- Consensus that stratification preferred
- Better ensures spectrum of genetic to natural community diversity (e.g., across north-south gradient) and an interconnected network
- Discussed possible subunits, e.g., watershed or ecoregion (or both)
- Is hybrid approach possible?