

Policy Statement: Forest Conservation and Connectivity

Approved December 8, 2017

Purpose:

This policy statement articulates the Forest Stewards Guild's position on the importance of landscape connectivity to maintain large contiguous forest blocks that meet multiple conservation goals. Landscape connectivity, particularly forest connectivity, should feature prominently in our organization's advocacy and decision-making processes. This policy statement on connectivity is meant to clearly give Guild members a solid, professional policy foundation when individually advocating for forests at all levels of decision-making.

Guiding Principle: "To keep every cog and wheel is the first precaution in intelligent tinkering," Aldo Leopold.

Landscape connectivity is central to all levels of forest conservation. Maintaining intact forest blocks and linkages across and between the forest matrix enhances biodiversity, wildlife habitat, climate adaptation, and our cultural connections to a landscape with a larger purpose. The Forest Stewards Guild believes that excellent forestry encompasses thinking, planning, and management at a variety of scales---property, landscape, region—and that principles of landscape connectivity leverage our work as practitioners across these scales. Maintaining and enhancing ecological function across the landscape is fundamental to conserving biological diversity. Ecological function here is the ability of plants and animals to thrive, reproduce, migrate, and move as climate changes, and the ability of natural ecosystems to function under natural processes. This is served by high-quality terrestrial and aquatic habitat, natural connections across the landscape, a wide variety of habitat features from low elevation to high, clean water, and healthy rivers, streams, lakes, ponds, and wetlands (Sorenson et al, 2015). These connected forested landscapes are the places where we believe the Guild approach to forest management can best balance the effects of human values on a larger, not fully-known system, where we try to manage a complex set of ever-changing expectations, goals, and understanding. There are always tradeoffs. But tradeoffs are the places where management happens, and where practitioners have the chance to practice their craft in hopes of improving the options for the future.

Members of the Forest Stewards Guild often question how the areas where we influence management fit into the greater forest context and how we might help assure and enhance forest connectivity. From small scale decisions about riparian corridors, to state-level discussions of what constitutes a functional "forest block," to hemispheric planning efforts to protect flyways, managers influence both creation, maintenance, and enhancement of connectivity. In the spirit of Franklin and Lindenmayer (2009): "...resource management practices that maintain or improve the suitability of the matrix are fundamental to the conservation of biodiversity." The professional ethos and principles of the Forest Stewards Guild can play a key role in emphasizing the importance of forest conservation and connectivity. This emphasis on conservation and connectivity supports and enhances themes of our previous policy statements, and fits within the Guild's overall emphasis on the practice of excellent forestry.

The Forest Stewards Guild advocates for actions including, but not limited to, the following:

- The long-term conservation of large, interior forest blocks (anchor blocks, connecting blocks and connecting lands)¹ where managers can seek a balance between reserve areas and working forests;
- The long-term conservation of forest blocks that create a network of connectivity. Examples include Yellowstone to Yukon (Y2Y) and Algonquin to Adirondack (A2A), The Northern Appalachians through Two Countries, One Forest (2C1F), and The Vermont Conservation Design (Sorenson et al, 2015);
- Harvesting trees in forest blocks and connectivity areas within the parameters of excellent forestry and conservation design;
- The thoughtful and minimal placement of all roads and where appropriate, the retirement of roads;
- Truck roads and permanent access roads that use appropriate design to allow for aquatic and terrestrial animal passage and minimize the disturbance of natural water flow;
- The expanded use and correct placement of infrastructure that allows for aquatic and terrestrial animal passage across roadways;
- Efforts to minimize conversion of intact forest blocks and connectivity blocks to non-forest, as well as restoration of non-forest back to forest;
- Conservation of uncommon physical landscape features, to maintain the diversity of habitat that may not fall in the forest block and connected landscapes;
- Conservation and rehabilitation of the riparian network to enhance connectivity;
- Smart growth strategies (concentrated growth) for housing and agriculture development.

Biologist E.O. Wilson recommended a plan for a "half-earth" approach to conservation (Wilson 2016). Evidence documenting our planet's sixth extinction event in the history of the world (Kolbert, 2014) is mounting. Landscape connectivity is not a new concept, nor is it a new component of our practice. By way of this statement, the Forest Stewards Guild affirms our

Connectivity Blocks: Connectivity Blocks are the network of forest blocks that together provide terrestrial connectivity at the regional scale. Size: 2,000 to 10,000 acres

Connecting Lands: Riparian areas, streams and rivers, forest land less than 2,000 acres but which form a bridge between large forest blocks. Note: multiple pathways are viable even if small.

¹ **Anchor Blocks**: *Definition*: Areas of contiguous forest and other natural communities and habitats (such as wetlands, ponds, and cliffs) that are unfragmented by roads, development, or agriculture. Size: ~10,000 acres;

commitment to incorporating practices that benefit forests and all the communities that depend on their services.

References and Acknowledgements

Kolbert, E., 2014. The sixth extinction: An unnatural history. A&C Black.

Franklin, J. F. and Lindenmayer, D. B. (2009) 'Importance of matrix habitats in maintaining biological diversity', Proceedings of the National Academy of Sciences. National Academy of Sciences, 106(2), pp. 349–350. doi: 10.1073/PNAS.0812016105.

Sorenson, E., Zaino, R. Hilke, J. and Thompson, E. (2015). Vermont Conservation Design: Maintaining and Enhancing and Ecologically Functional Landscape □. Vermont Fish and Wildlife and Vermont Land Trust. 24pp.

Wilson, E.O., 2016. Half-earth: our planet's fight for life. WW Norton & Company.

The Forest Stewards Guild acknowledges the work of the Vermont Department of Fish and Wildlife and the Vermont Land Trust's publication <u>Vermont Conservation Design: Maintaining and Enhancing an Ecologically Functional Landscape</u>, Sorenson et al. 2015, for the inspiration and framework for this policy statement.