



Background:

With the increasing frequency and extent of disturbances such as stand-replacing wildfires, insect outbreaks, and land use change - including use conversions and road construction- wildlife habitat connectivity is declining across all major terrestrial biomes of North America. In addition, climate change may affect the spatial distribution of habitats and connectivity. Species vary widely in their dispersal abilities, which strongly influence connectivity and habitat fragmentation. The newly released planning rule requires the development of forest and range plans that maintain or restore connectivity of healthy terrestrial and aquatic ecosystems. A similar effort is ongoing at the state level, where the 19 Western Governors have called for coordinated planning to maintain and enhance wildlife connectivity.

To improve wildlife corridors, Forest Service scientists are working to:

- ◆ Synthesize existing knowledge about connectivity analysis methods,
- ◆ Collate the results of published analyses as they pertain to both the Forest Service and non-Forest Service managed lands surrounding them, and
- ◆ Evaluate the ability of currently available software and methods to provide decision support for managers.

Research Activity:

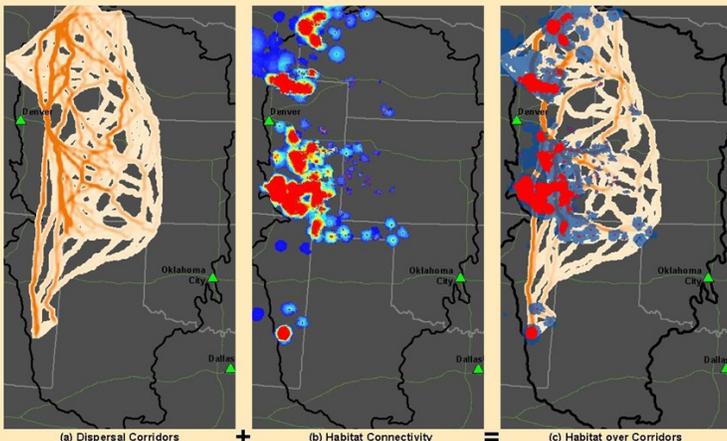
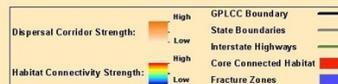
Forest Service scientists, in collaboration with partners, have developed habitat connectivity and corridor maps for several individual species, such as wolverines and lesser prairie-chicken, and landcover types. Moreover, Forest Service researchers are now conducting a synthesis of all wildlife connectivity mapping and modeling efforts across the United States. This effort is being coordinated with the Western Governors Association – Landscape Integrity Workgroup, and our scientists will participate in future model validation for all corridor-related products that have major policy and social ramifications.

The products of this synthesis of approaches and efforts for broad-scale landscape connectivity will aid in integrated and collaborative land management planning.

Online Resources:

- ◆ <http://www.westgov.org/initiatives/wildlife>

Swift Fox: Dispersal Corridors and Habitat Connectivity



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