

# Habitat Connectivity in Prairie Restoration

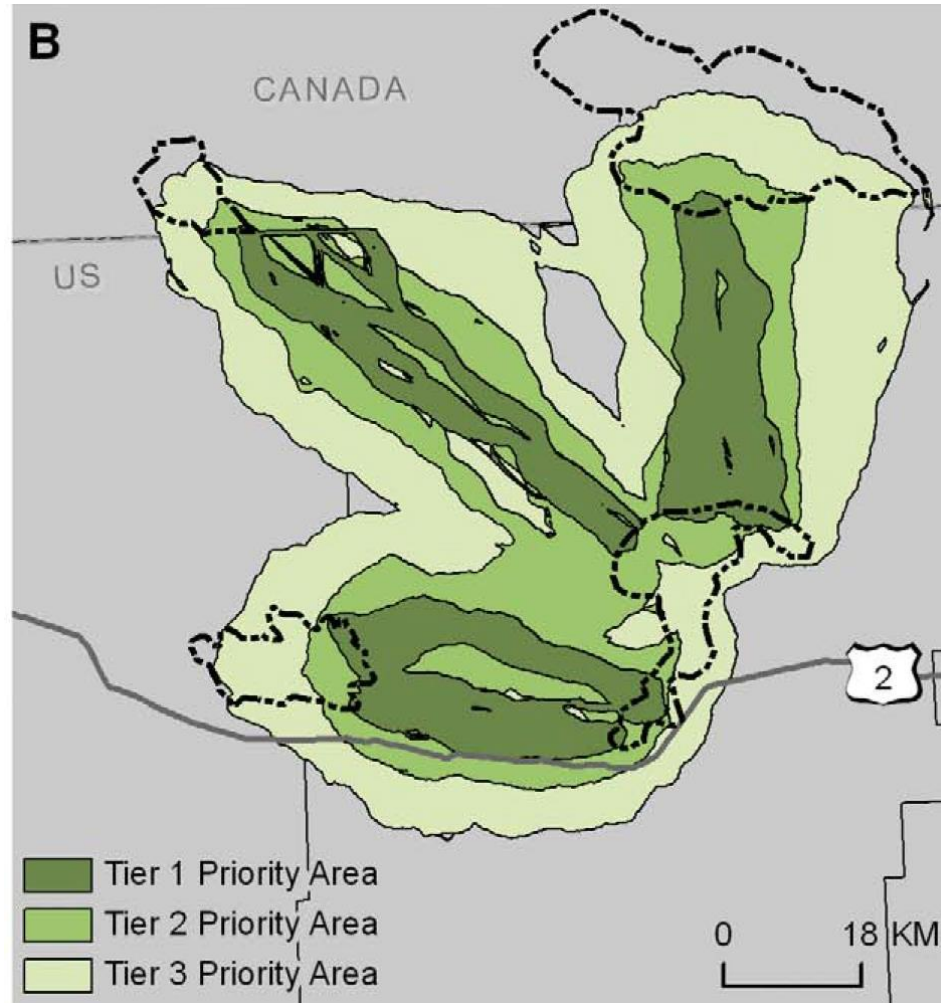
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Native Prairie Restoration Conference

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# What is connectivity?



# Good connectivity

- Easier migration
- Increase dispersal
- Connect populations
- Reduce isolation
- Improve adaptive capacity

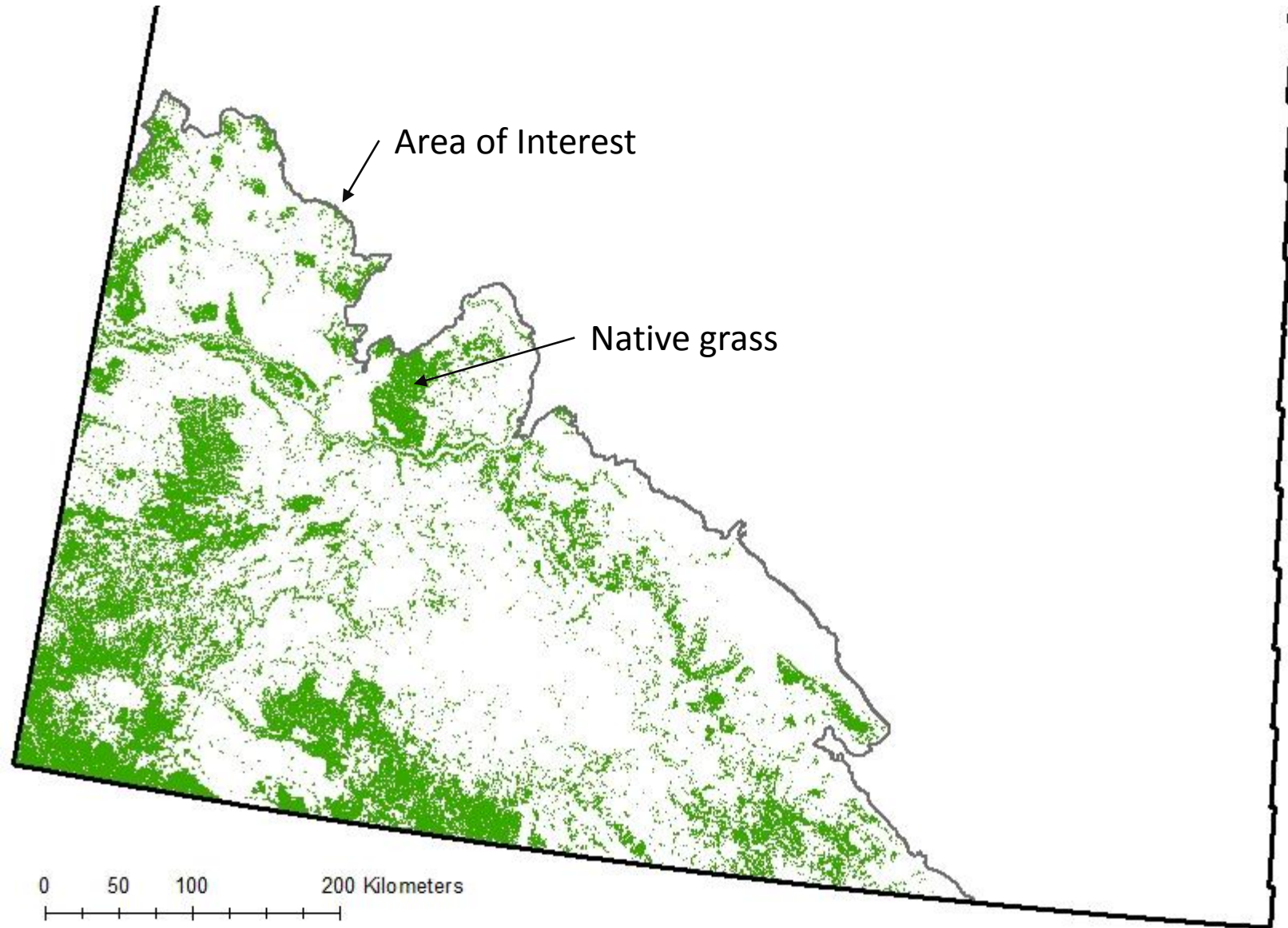
# Bad connectivity?

- Disease spread
- Invasive species
- Increase predation

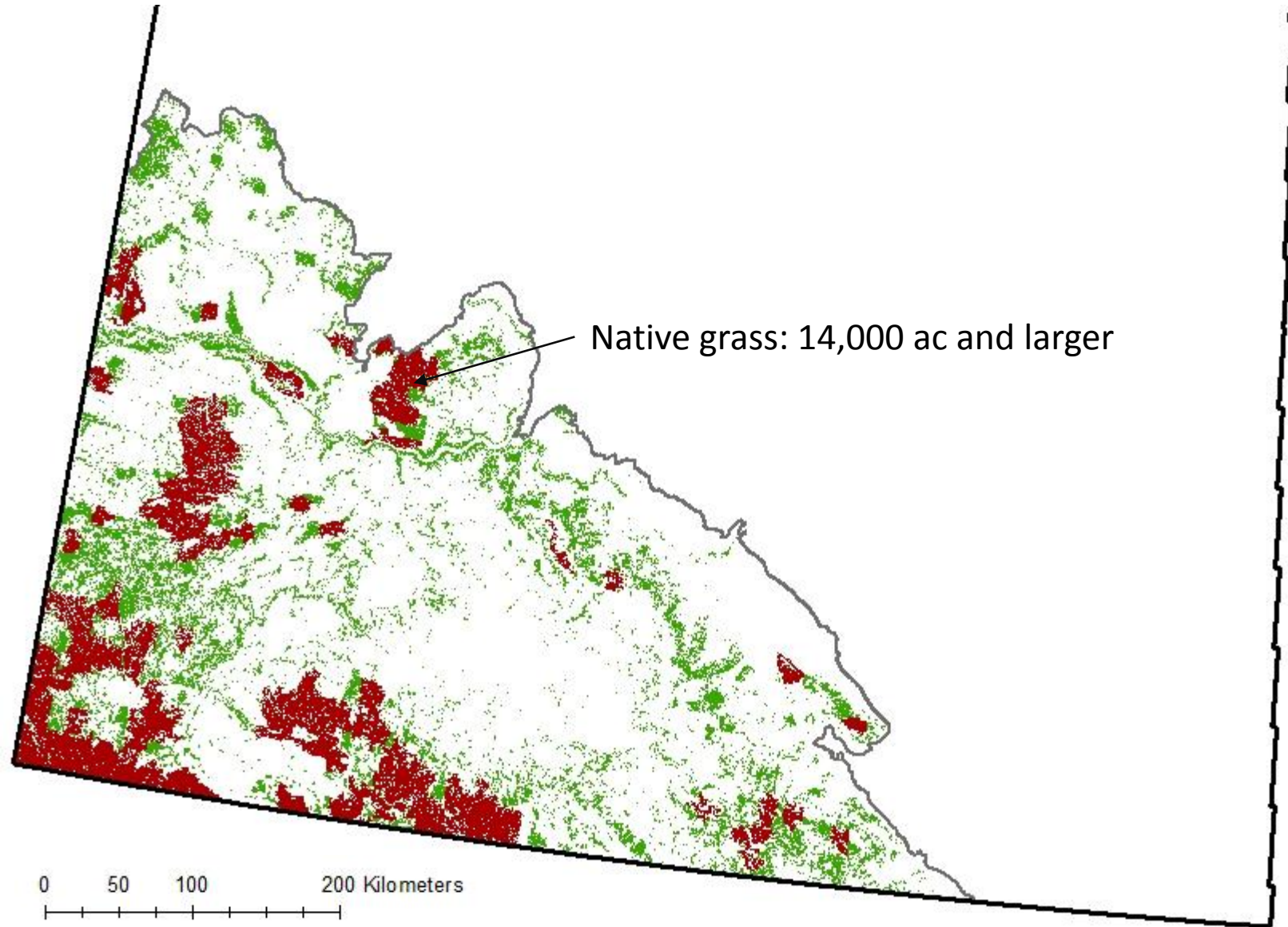
# From abstract to applied...

We need tools to identify where restoration efforts can have the greatest impact on connectivity.

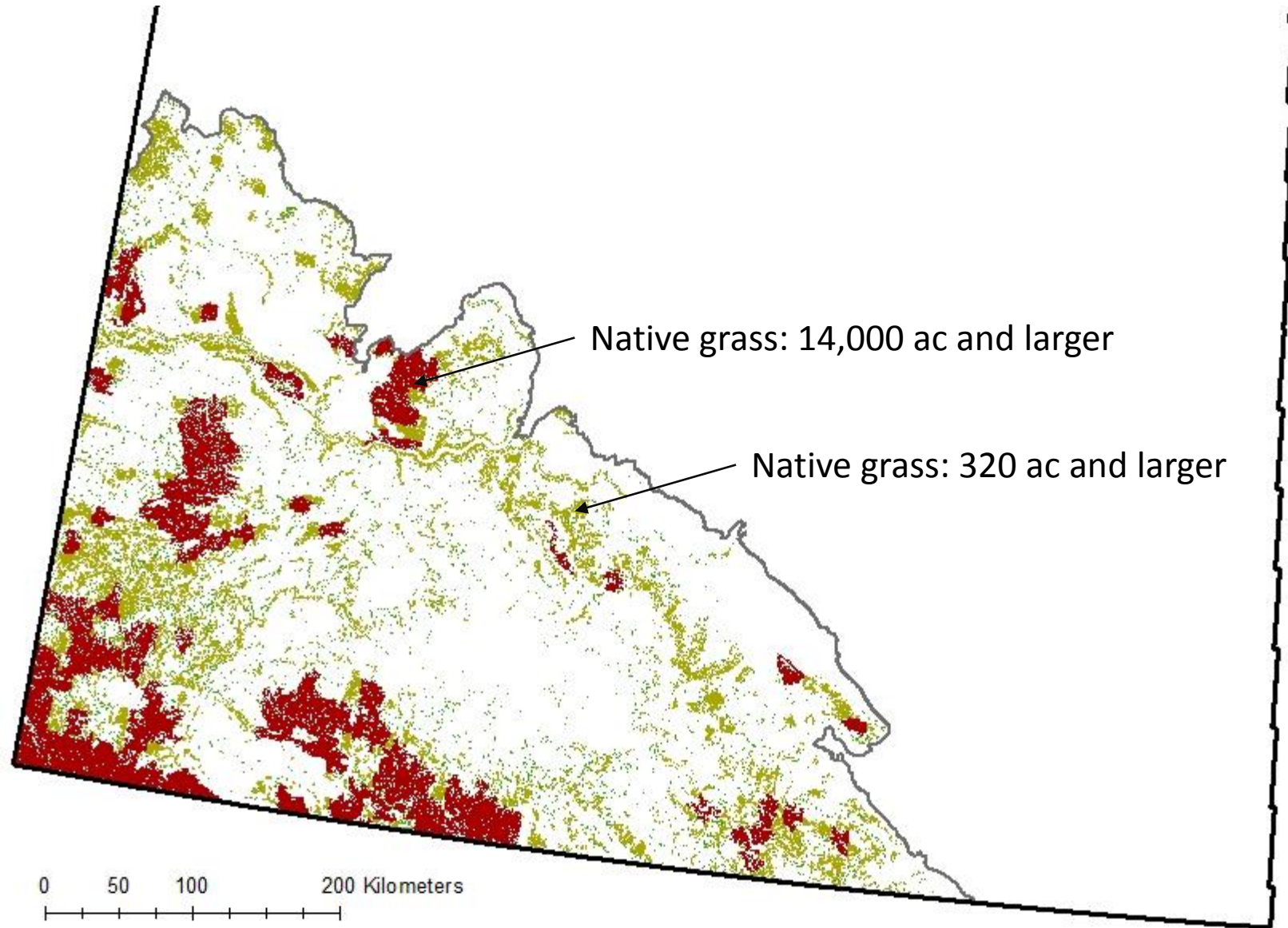
# Swift Fox in southern SK



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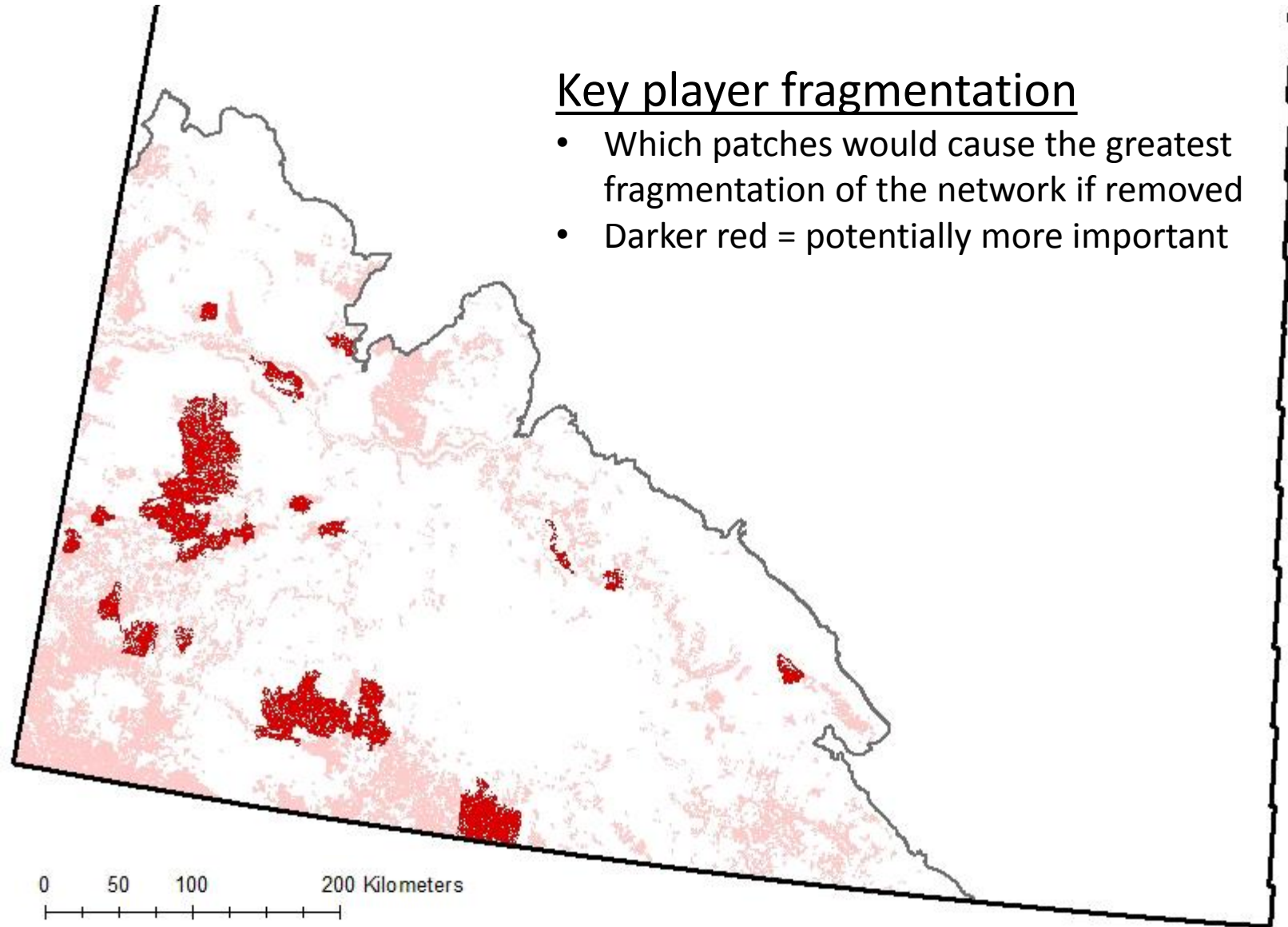


Which of the patches have the potentially most important role in connectivity?

# Swift Fox in southern SK

## Key player fragmentation

- Which patches would cause the greatest fragmentation of the network if removed
- Darker red = potentially more important

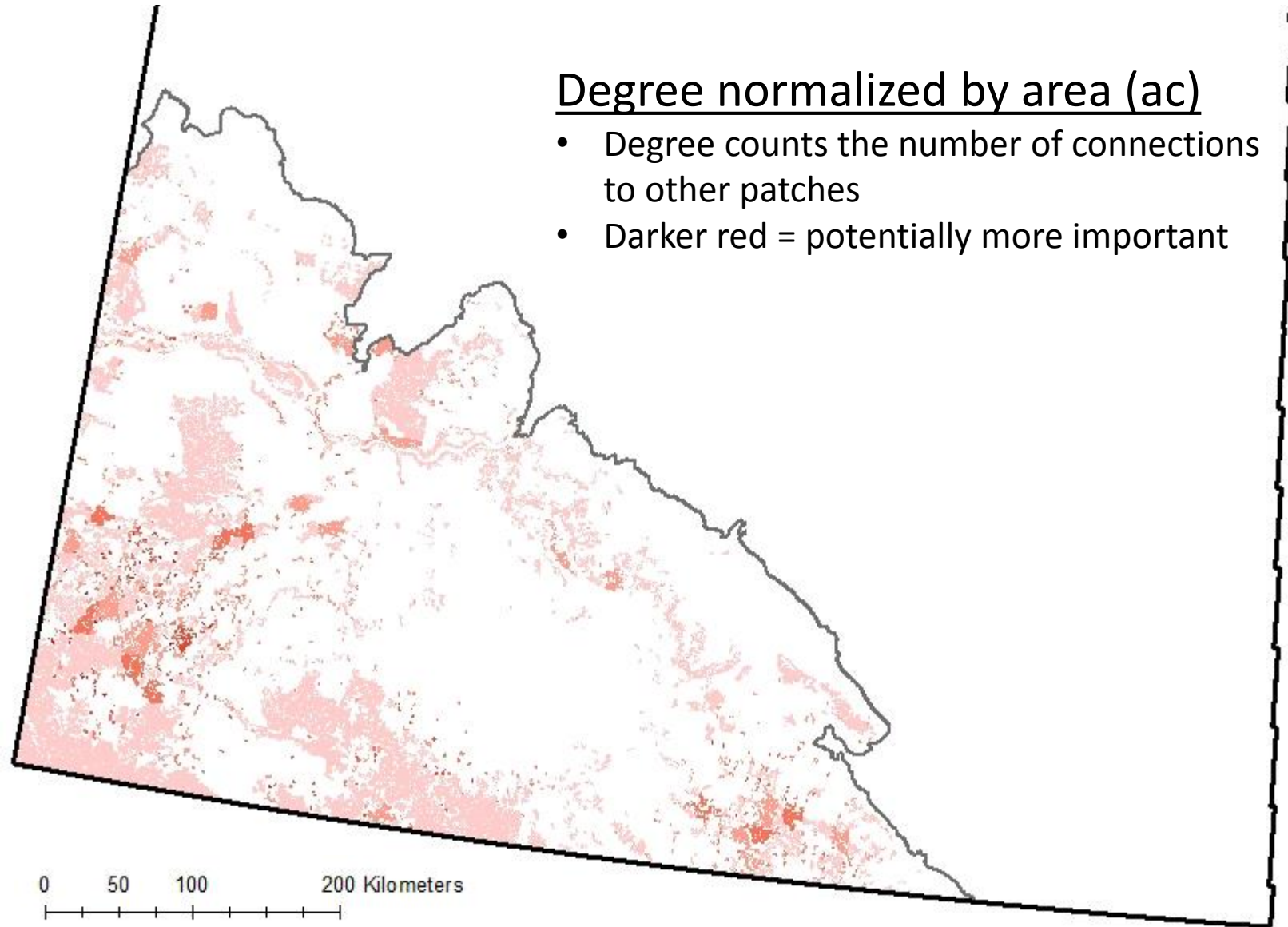


We know the big patches are important... but what about the smaller patches?

# Swift Fox in southern SK

## Degree normalized by area (ac)

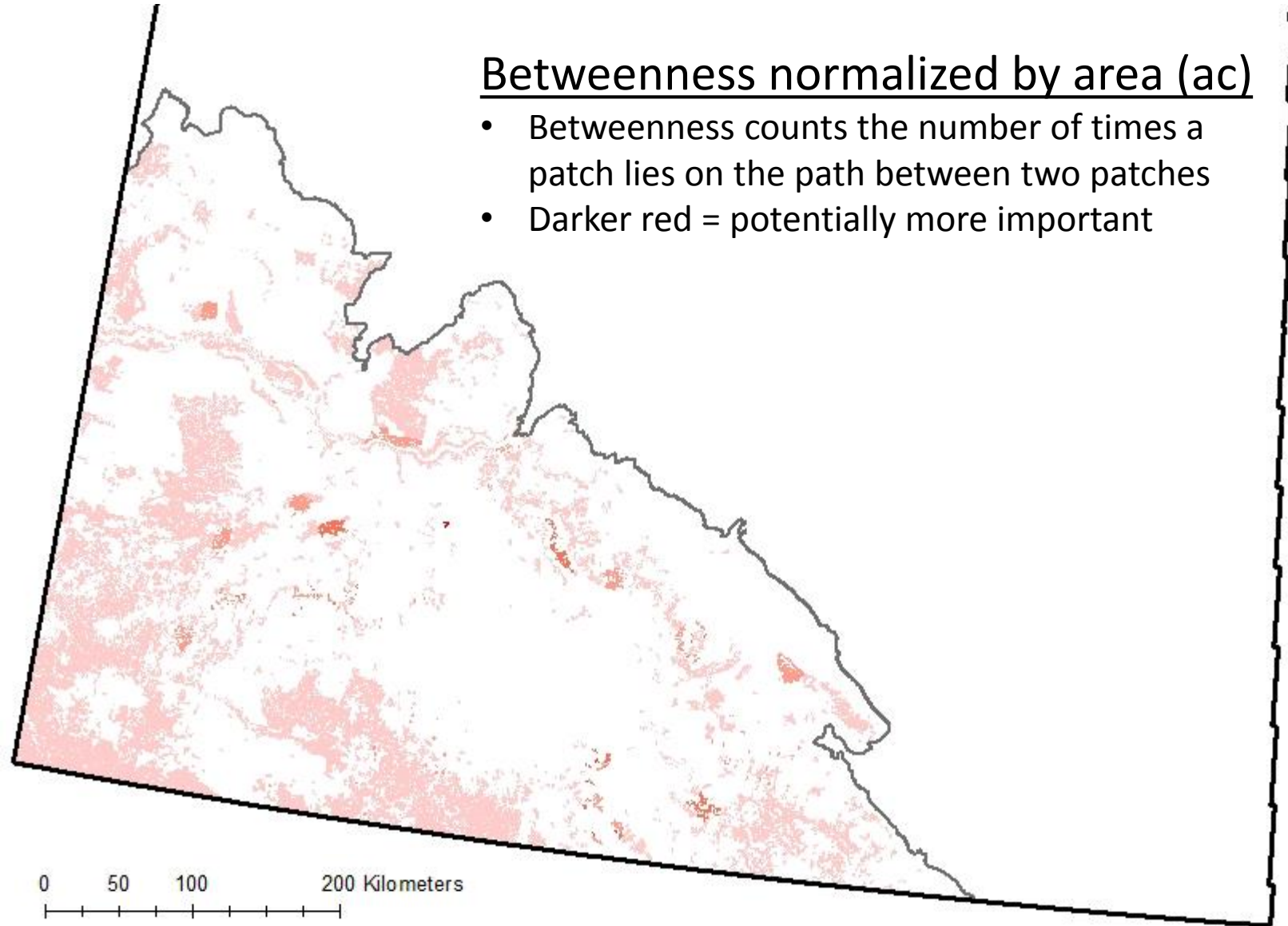
- Degree counts the number of connections to other patches
- Darker red = potentially more important



# Swift Fox in southern SK

## Betweenness normalized by area (ac)

- Betweenness counts the number of times a patch lies on the path between two patches
- Darker red = potentially more important



# Still left to do....

- Improve integration of species' ecology
- Multi-species, multi-scales
- Consider land cover mosaic

*Thank you!*