

Fence-Marking and New Fence Collision Tool

NRCS

SGI Webinar

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NRCS/ Mule Deer Foundation

Roosevelt, UT

Photo by Jeremy R. Roberts, Conservation Media

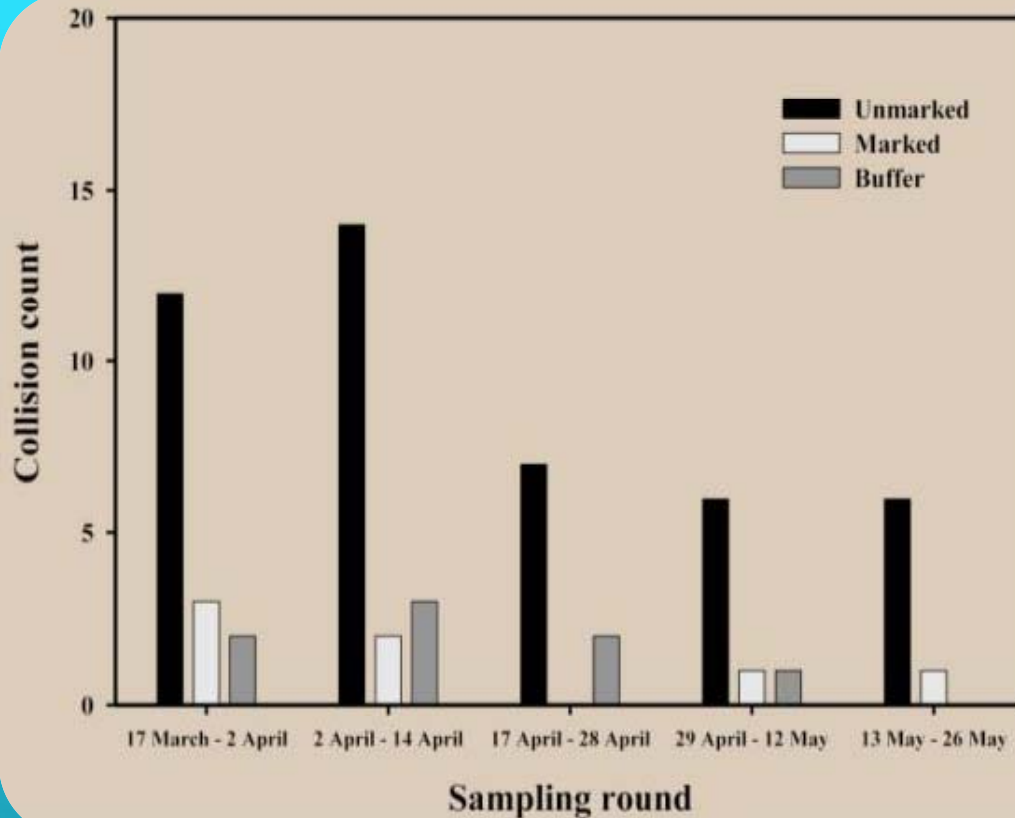
Background



Photo by Jeremy R. Roberts, Conservation Media

- ▣ Fence-marking efforts can reduce collisions by up to 83% in high risk landscapes.
- ▣ Marking can prevent 800-1000 SAGR fence collisions (All males attending leks in Alb., Sask., ND, SD, and WA combined)
- ▣ Fence-marking is important:
 - Near active leks
 - Wintering grounds
- ▣ The Conference Report states that NRCS will apply fence markers within a minimum of $\frac{1}{4}$ mile of all leks.

Fence Marking Research



Treatment	Collisions
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Marked	7
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Unmarked	42
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B.S. Stevens, K.P. Reese,
J.W. Connelly, and D.D. Musil
Univ. Idaho and ID Fish and Game

How to Mark Fences

GETTING STARTED

MATERIALS

- **Vinyl undersill trim strips**
 - Manufactured for house siding
 - 12 ft. strip yields 48 markers
- **Reflective Tape (optional)**
 - All-weather foil tape (1.5-2 in. width)

TOOLS

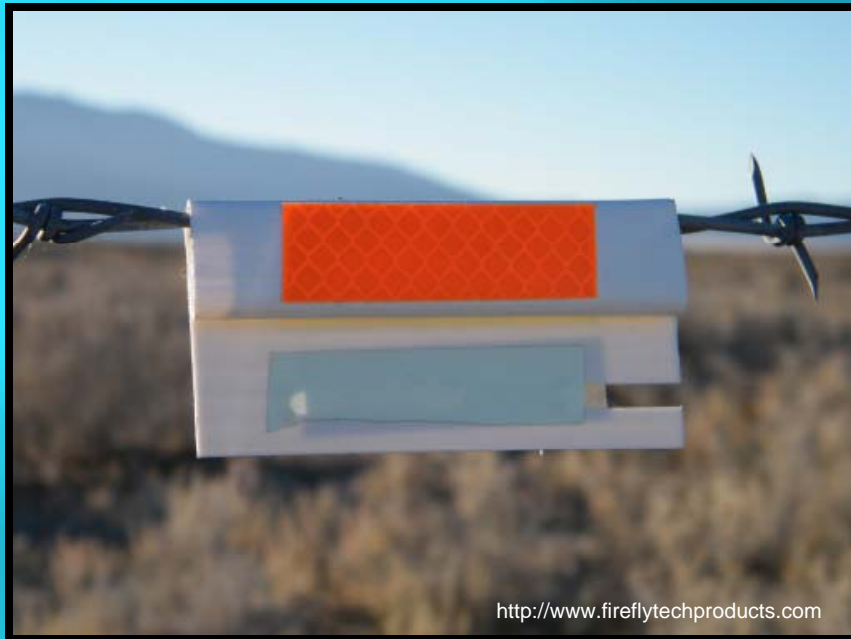
- Miter saw
- Tin snips
- Scissors
- Safety glasses
- Dust mask
- Gloves

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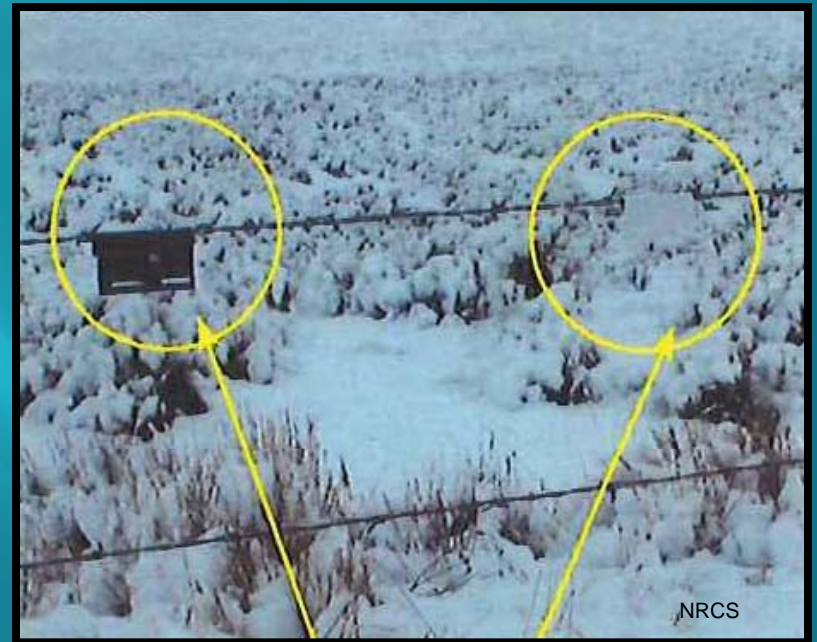


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Fence Markers



Reflective Tape



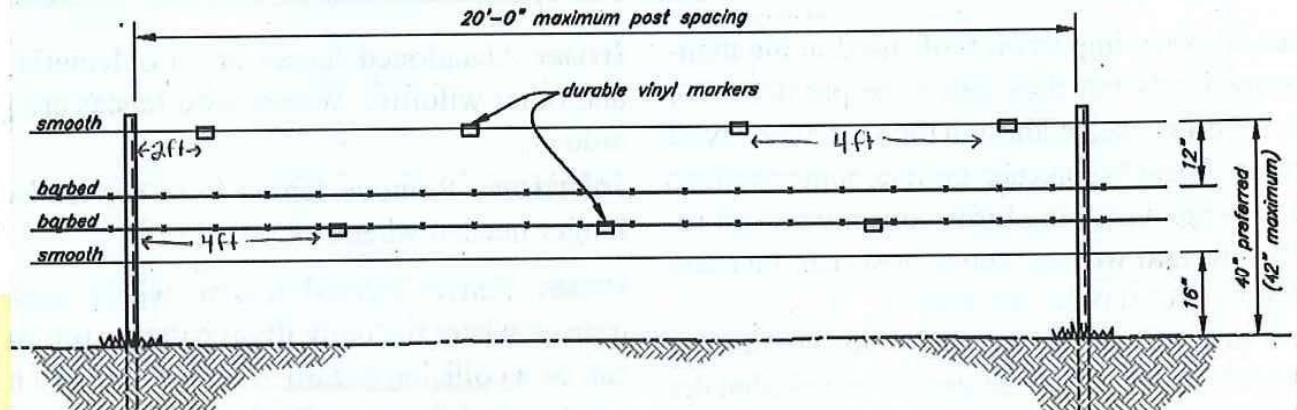
Alternate Black and White

How to Mark Fences

INSTALLATION

"WILDLIFE-FRIENDLY" FENCE DESIGN

Mark the top wire and third wire down from the top. If fence posts are 12 ft apart, use 5 markers (3 on top wire & 2 on 3rd wire). If fence posts are spread farther than 12 ft apart use 7 markers (4 on top wire & 3 on 3rd wire).



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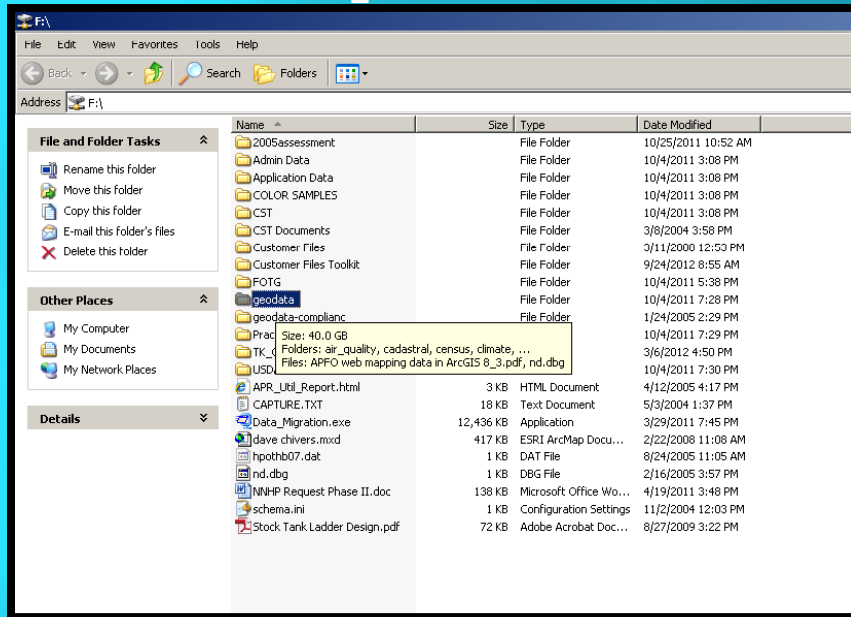
Photos by Jeremy R. Roberts, Conservation Media

The Model

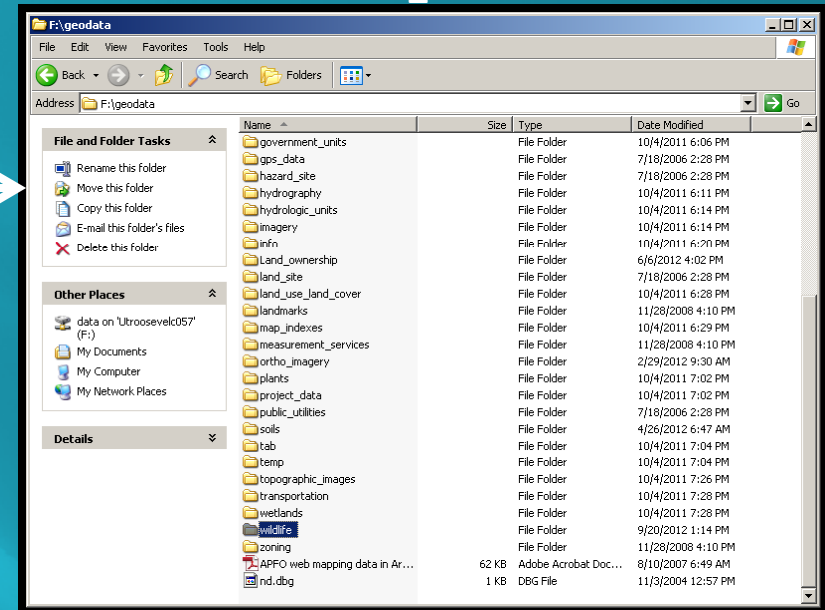
- ▣ Model is built on breeding information (Bryan Stevens) :
 - Model:
 - ▣ Topographic ruggedness (more flat and open = higher risk of collision)
 - ▣ Lek locations
 - Lek data is from 2007 data sets range-wide
- ▣ Conservation planners can use the models to prioritize fence-marking efforts to reduce collisions by up to 83% in high risk landscapes

Where are the Shapefiles Found?

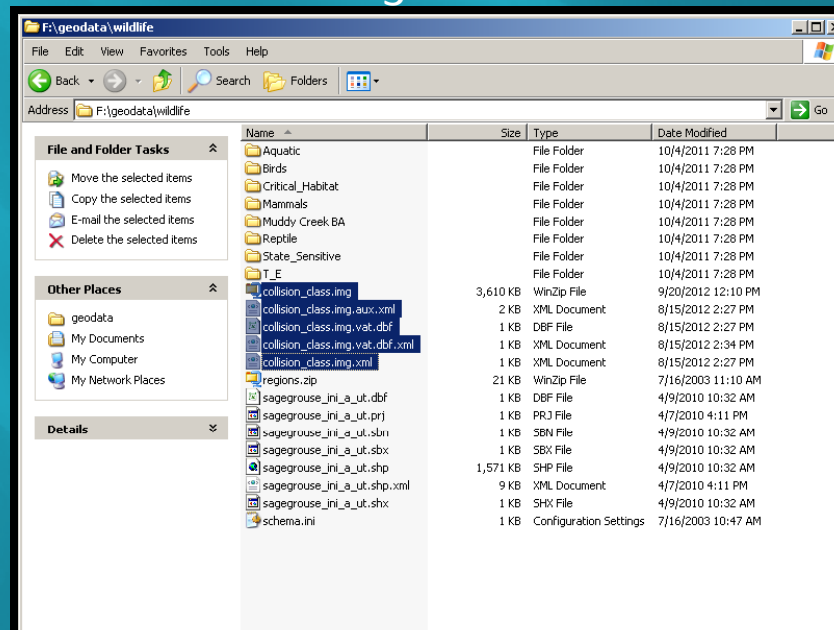
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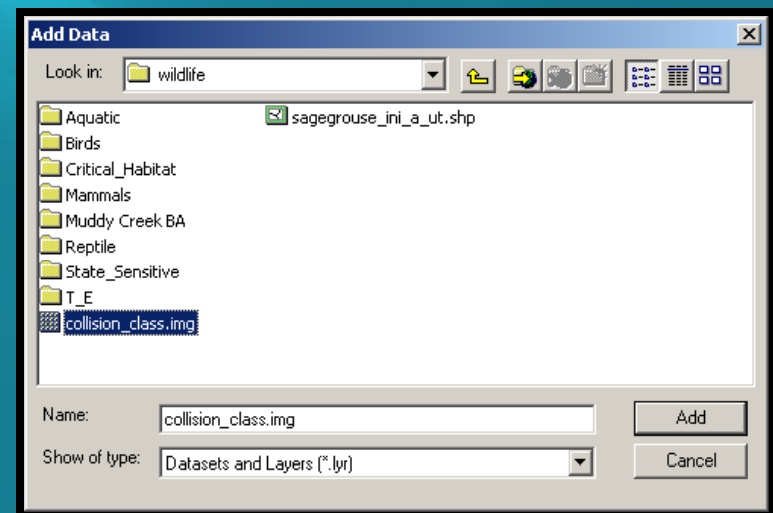
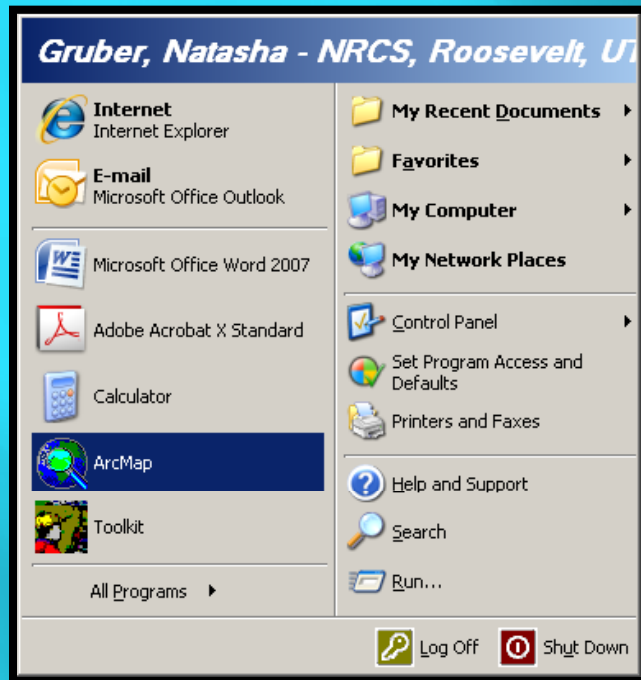
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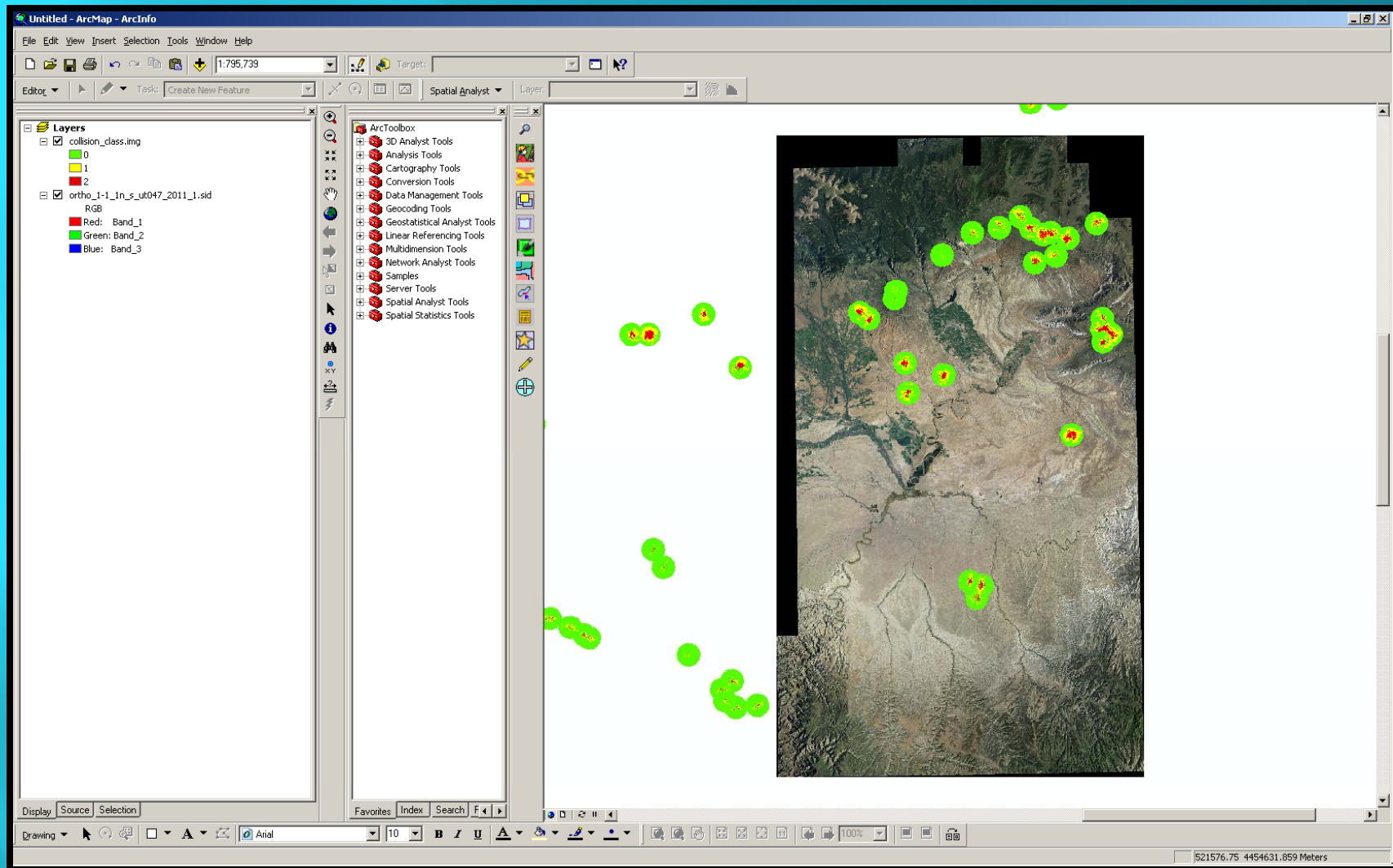


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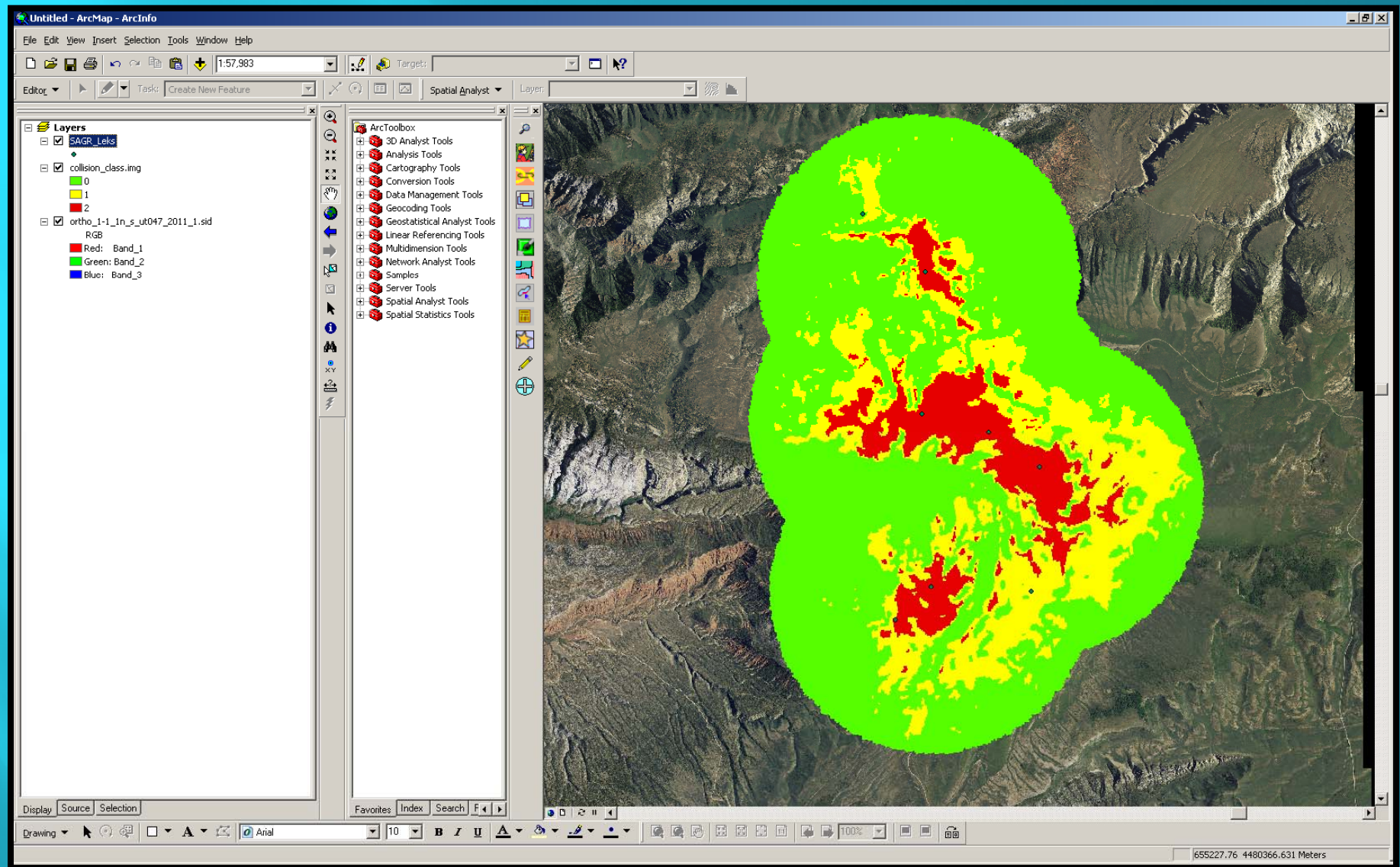


How to Use the Shapefiles

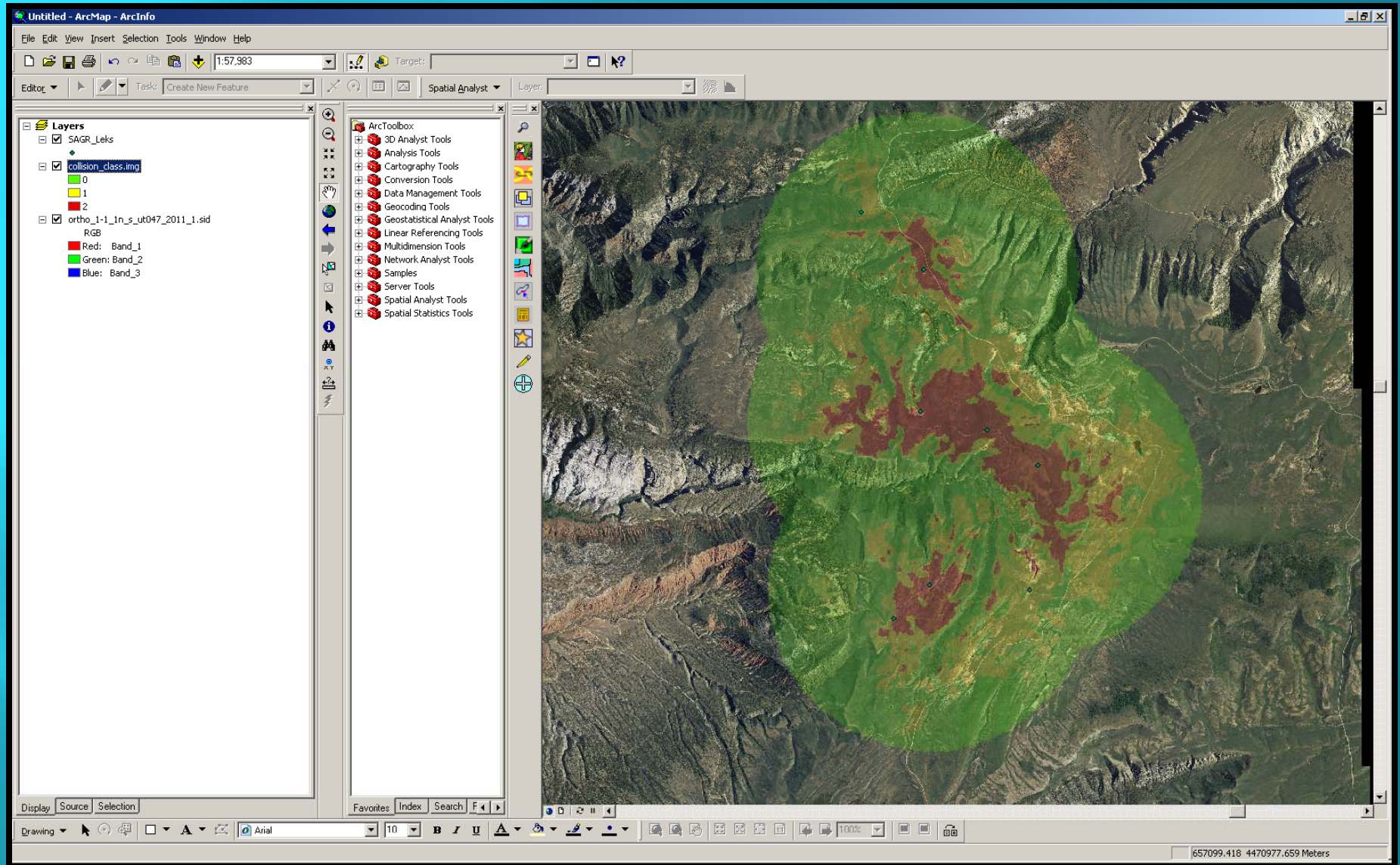


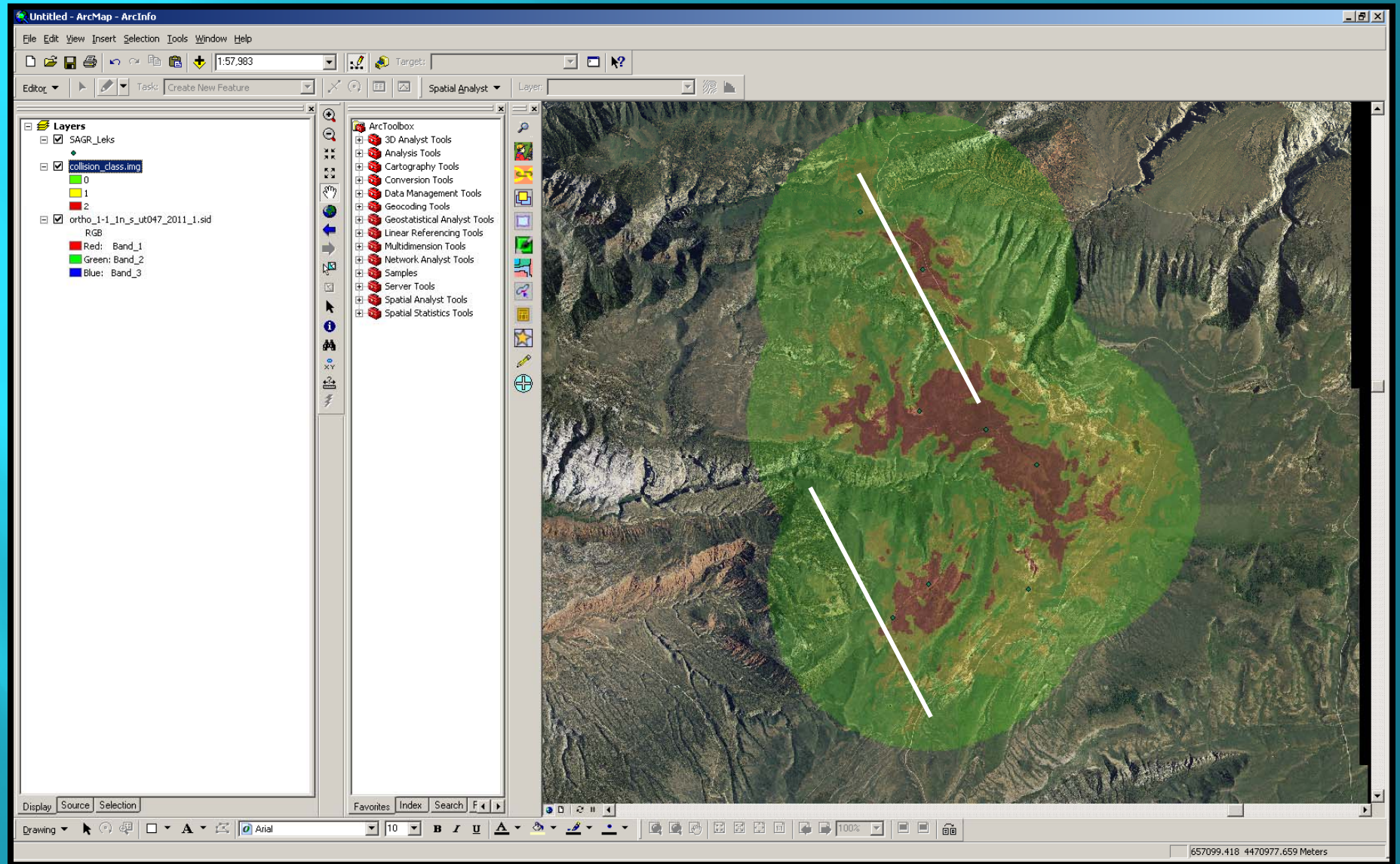


- 3 colors on collision raster
 - Red: Highest risk, indicates risk of ≥ 1 collision per lekking season
 - Yellow and Green: lower risk levels



- Model:
 - Lek location
 - Topographic ruggedness





Summary

- ▣ The Conference Report states that NRCS will apply fence markers within $\frac{1}{4}$ mile of all leks.
- ▣ **Red Areas** = higher risk areas and should be considered for fence marking.
- ▣ Model is built on breeding information :
 - Use local information and common sense:
 - ▣ Look for areas that may have a lot of birds moving back and forth.
 - ▣ Look for flat, open spaces in the red zone: likely high risk areas.
 - ▣ Identify winter habitat areas.
 - ▣ Use the best information and data available (i.e. Graduate research, UTDWR Biologist).



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