#### Fence-Marking and New Fence Collision Tool

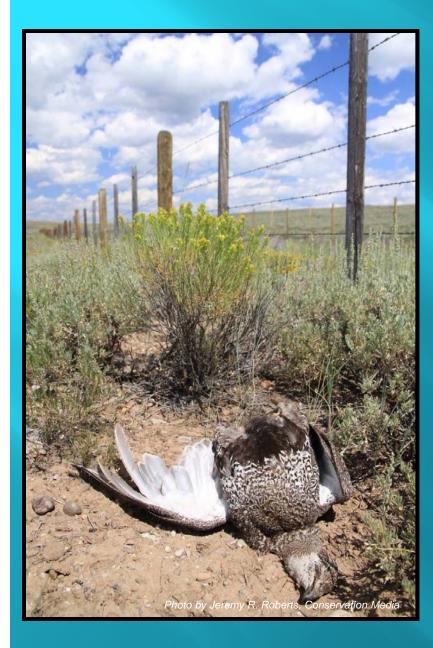
NRCS SCI Webinar 24 October 2012

Natasha Gruber SGI Partner Biologist RCS/ Mule Deer Foundatior

**Roosevelt**, UT

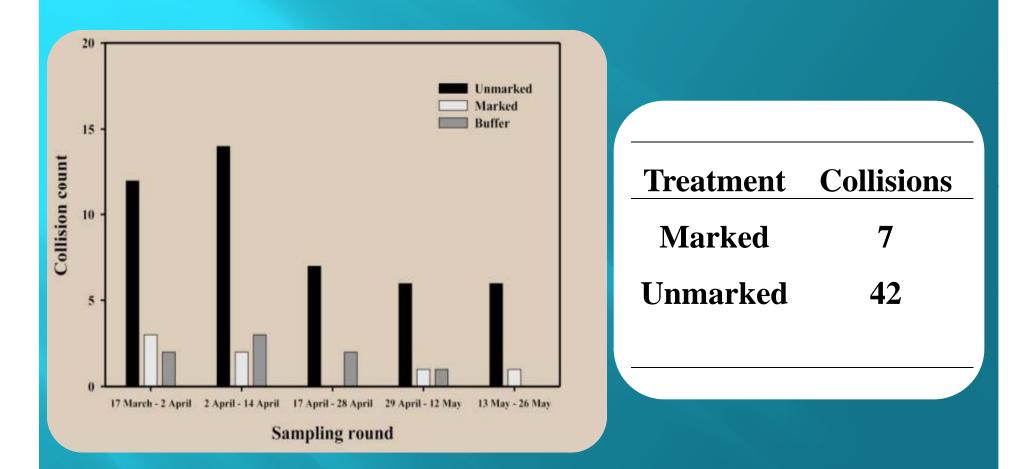
Photo by Jeremy R. Roberts, Conservation Media

### Background



- 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 <sup>1</sup>/<sub>4</sub> mile of all leks.

### **Fence Marking Research**



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)

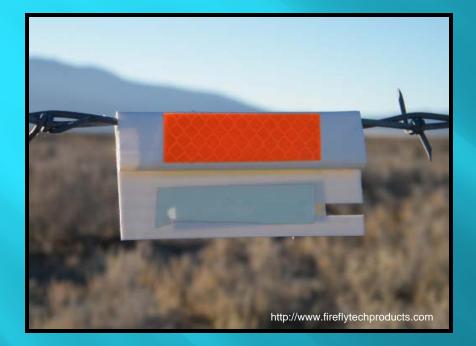
#### TOOLS

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



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### **Fence Markers**

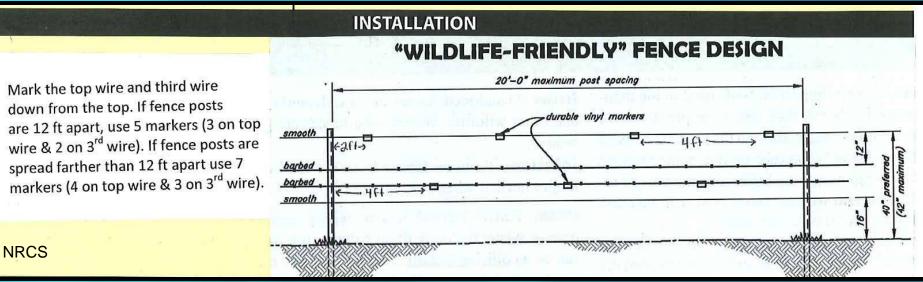




Reflective Tape

Alternate Black and White

## How to Mark Fences









#### The Model

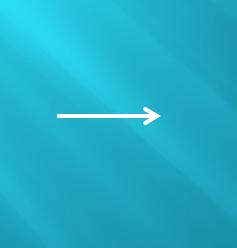
Model is built on breeding information (Bryan Stevens) :

- 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 fencemarking efforts to reduce collisions by up to 83% in high risk landscapes

#### Where are the Shapefiles Found?

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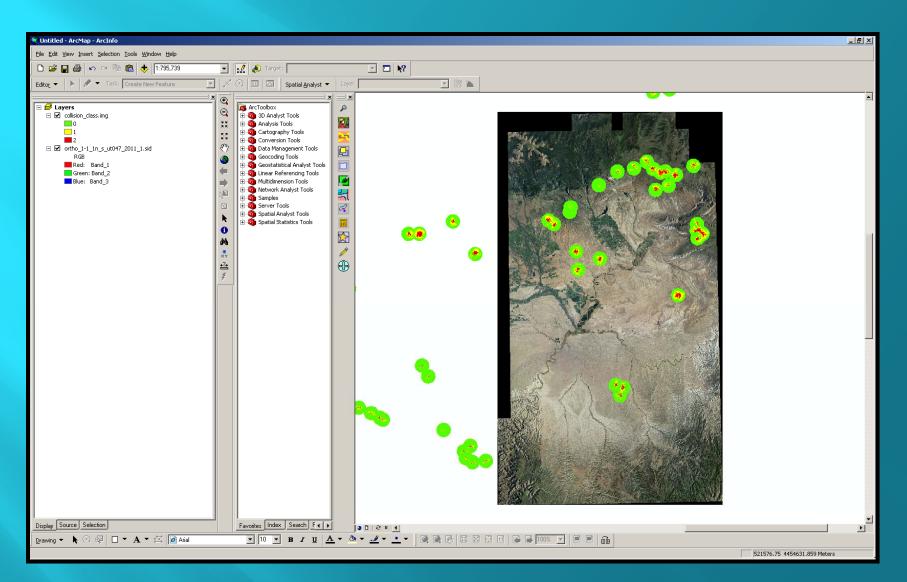
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## How to Use the Shapefiles

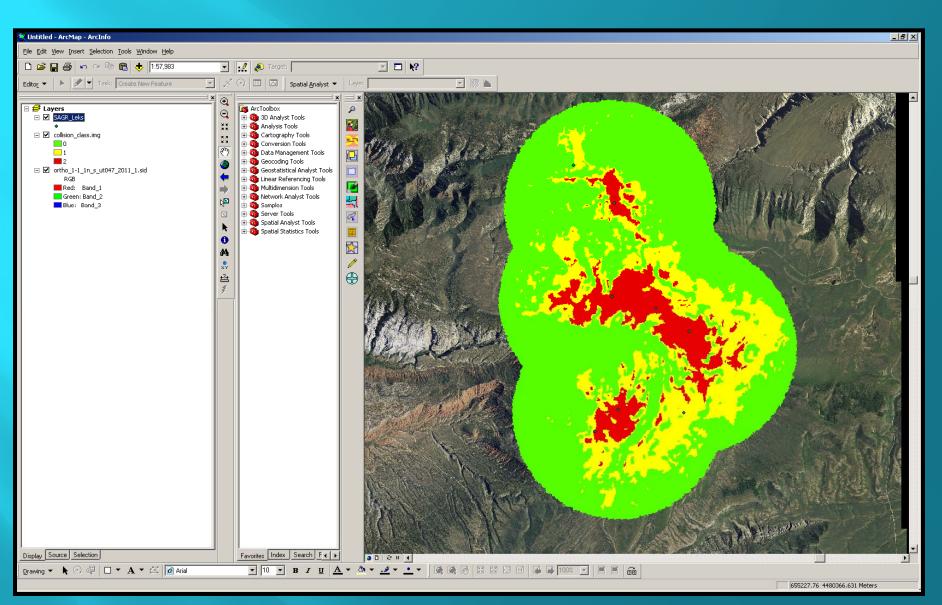
Gruber, Natasha - N	IRCS, Roosevelt, UI
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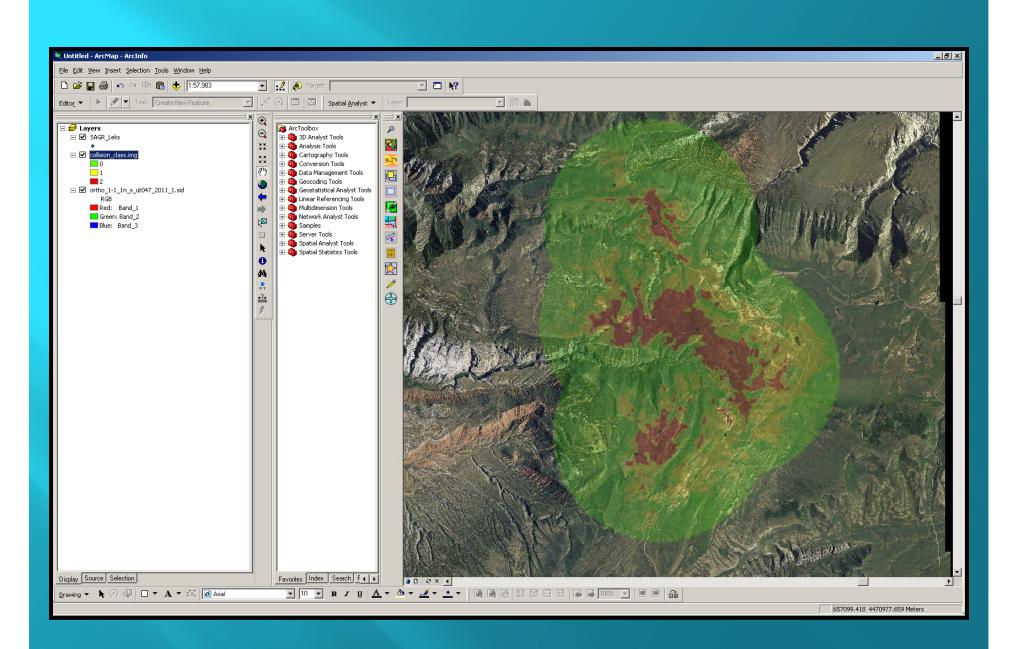
#### ■ 3 colors on collision raster

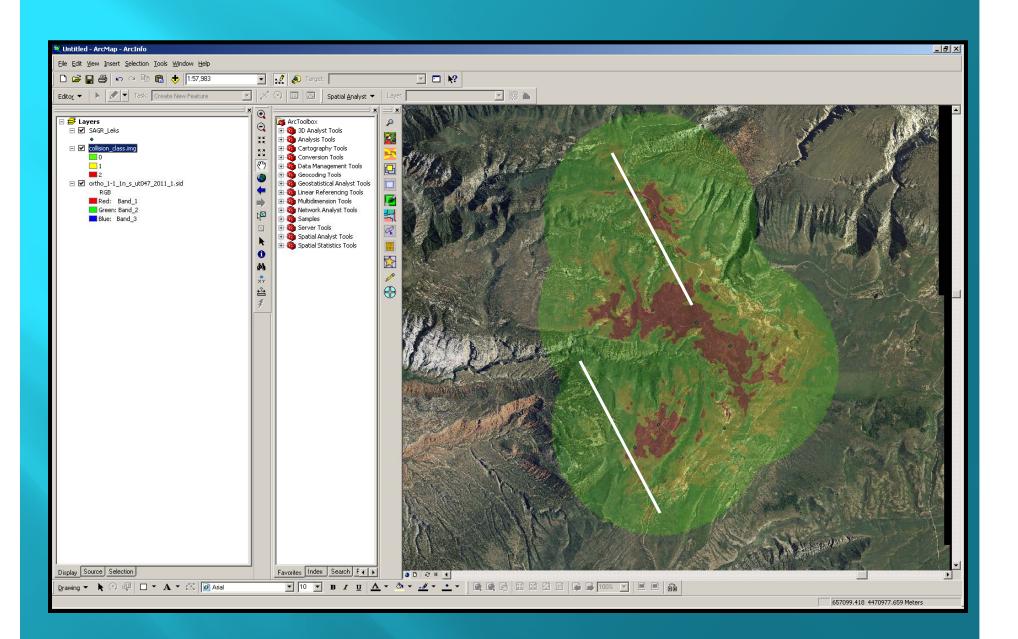
- Red: Highest risk, indicates risk of  $\geq$  1 collision per lekking season
- Yellow and Green: lower risk levels



#### Model:

- Lek location
- Topographic ruggedness







- The Conference Report states that NRCS will apply fence markers with in ¼ 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).

# Marking Fences Can Save Lives!

hoto by Jeremy R. Roberts, Conservation Media

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