Life on the Edge

Establishing vibrant densities of pheasant and grey partridge on a modern farm

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Enchant Project

Increase densities of grey partridge and pheasant

Increase biodiversity

Determine habitat enhancements needed

Test harvest targets

Farm profitability

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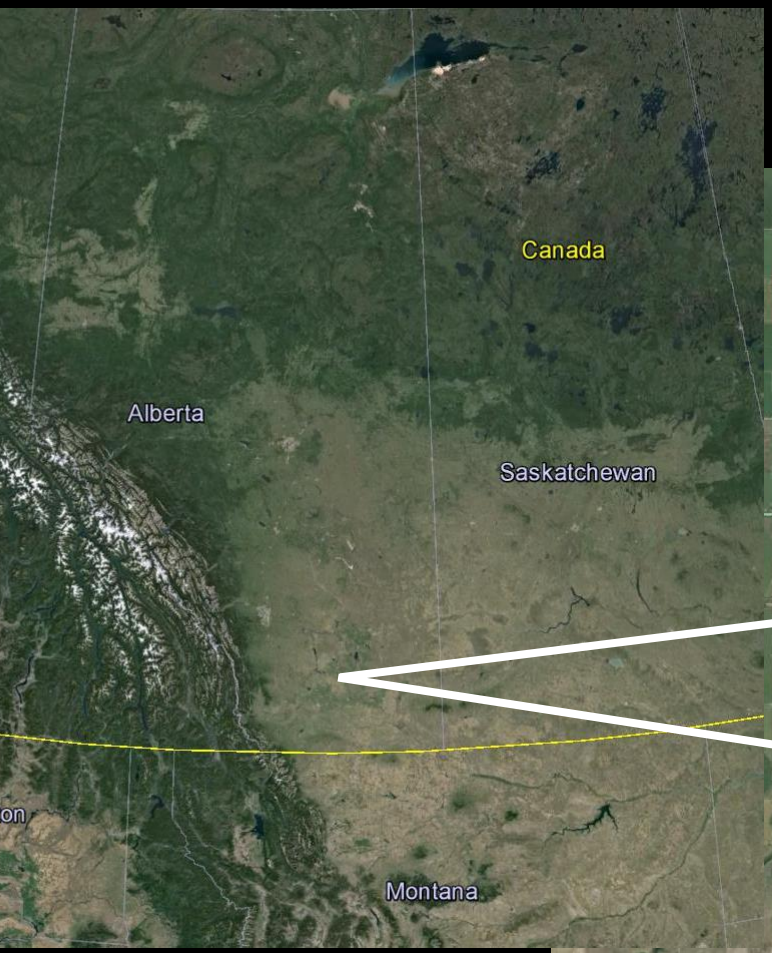
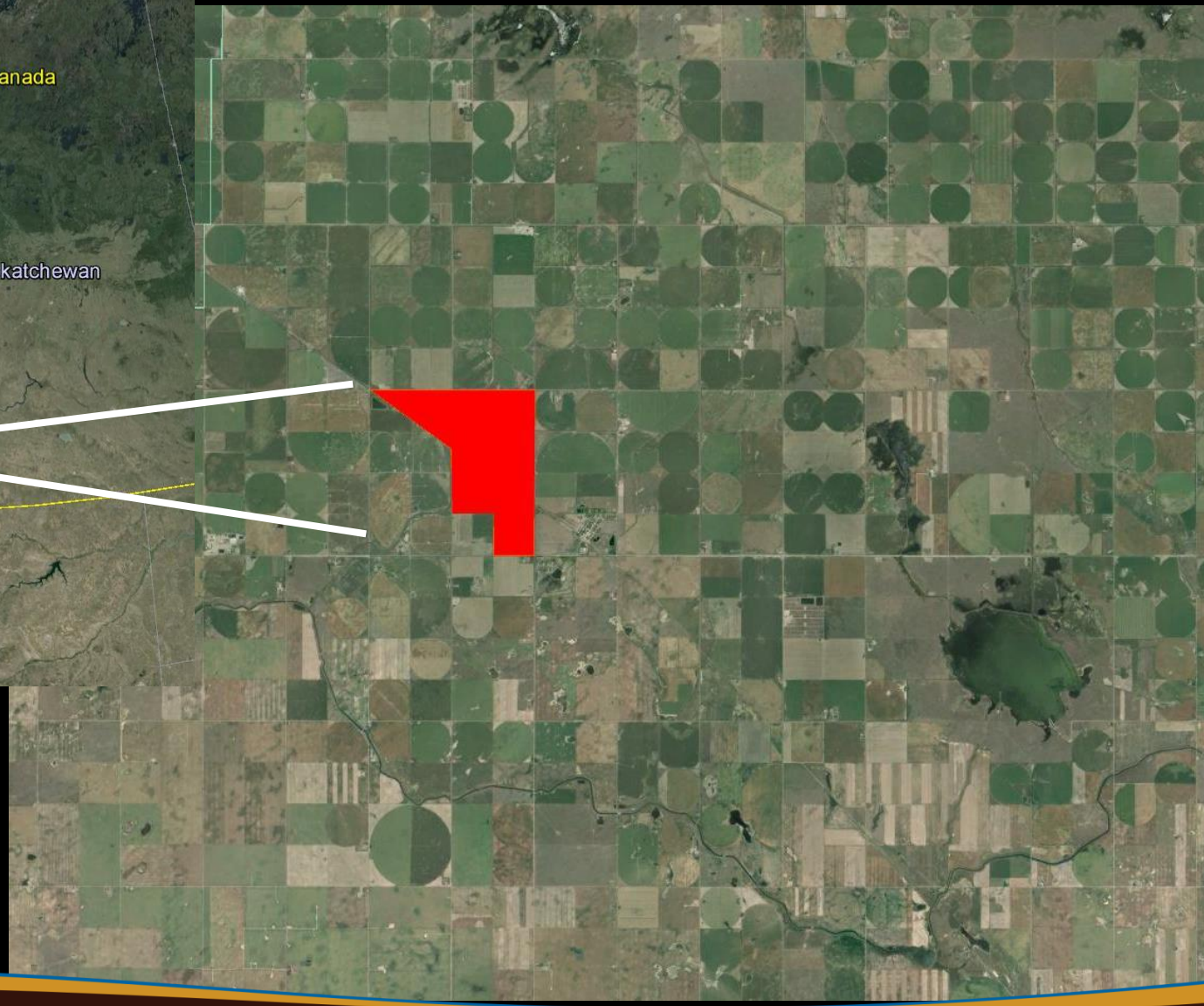




Highlights today

1. Creating habitat within the farm

2. Predator management approach

3. Harvest strategy

4. Trialing approaches to establish Pheasants

What's changed?

Intensified farming

Herbicides and pesticides

Predator community change?

Habitat Change

Pheasants and grey partridge ~ 1908

First hunting season – 1930s

Reapers

Pre-WWll

stooks and threshing

Post WW11 - modernization

Reaper, stooks, and threshing

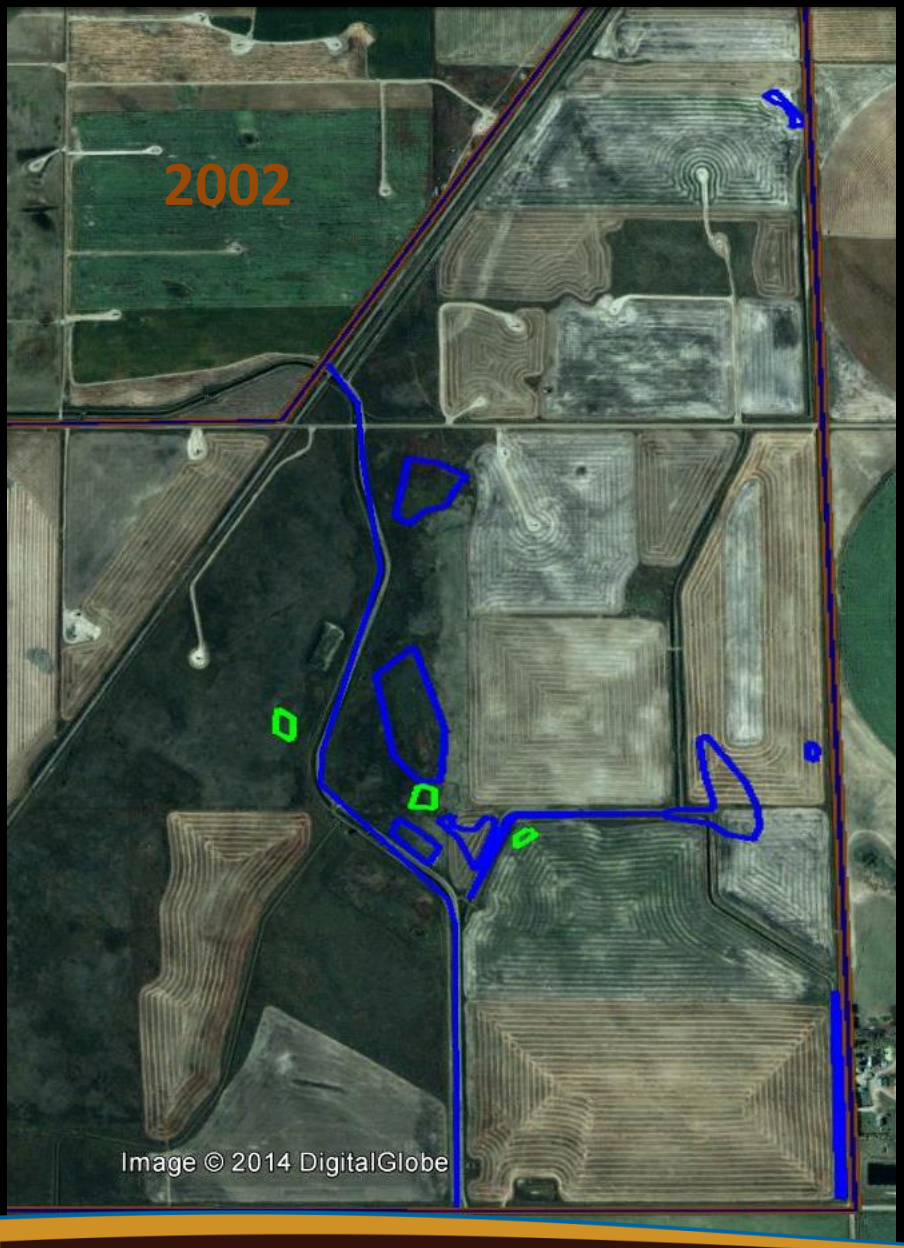
"combined"

Habitat Change

Modern methods

minimize risk - optimize yield - save time

background


2002
Image © 2014 DigitalGlobe


2012
Image S. Alberta MD s and Counties
Imagery Date: 12/31/2011 50°11'00.11" N 112°27'17.32" W elev

Key habitat needs

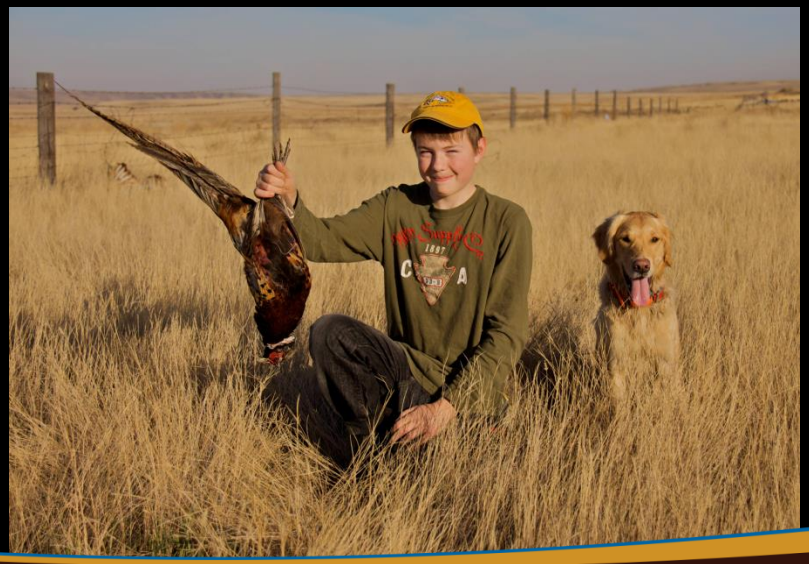
Edge habitat

- Nest habitat (residual grasses)
- Tall cover (shrub or sorghum/millet)
- Chick mix (insects)

Improve nest success

Desirable territories

Chick survival

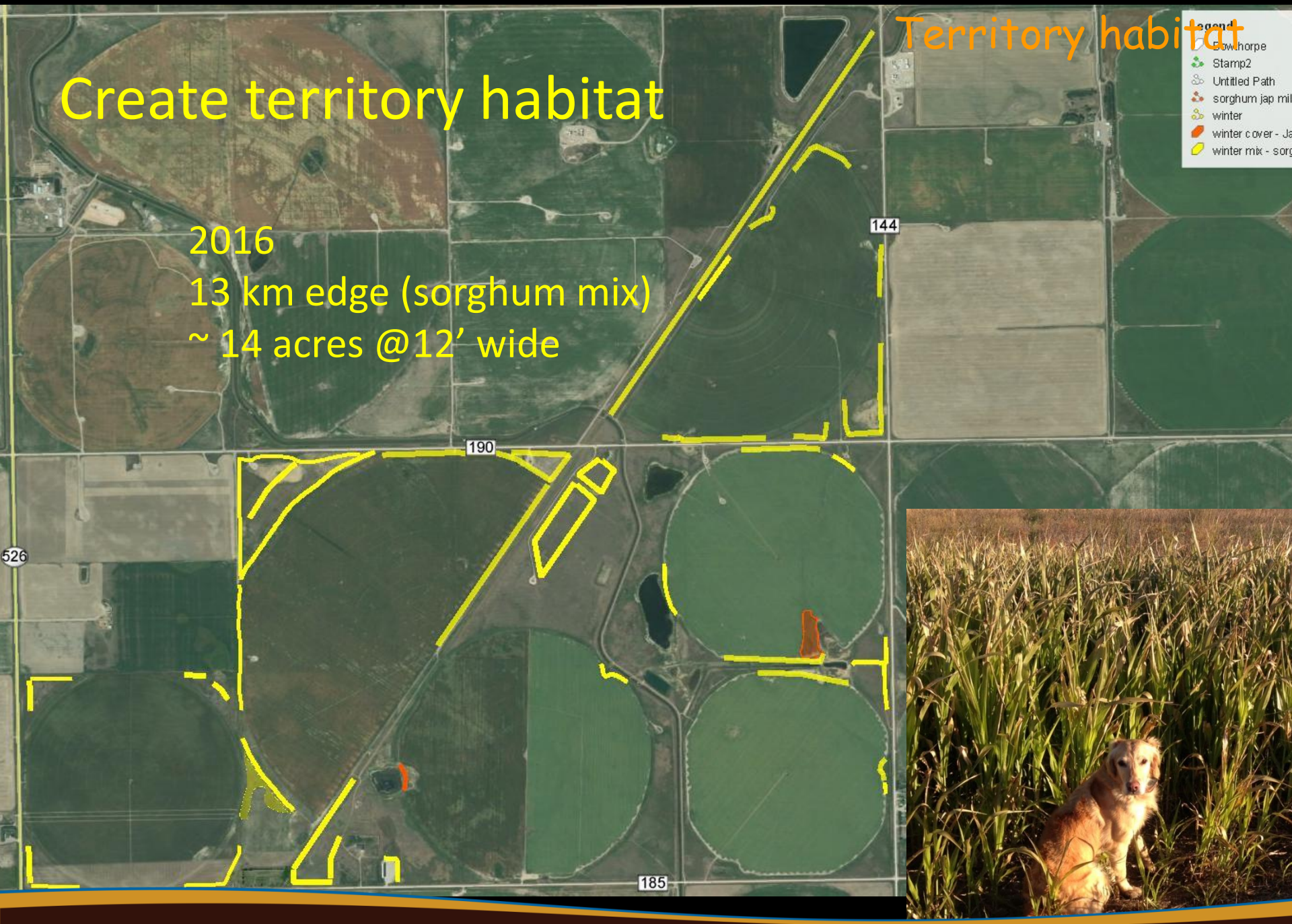


Create territory habitat

13 km existing

19 km to be created

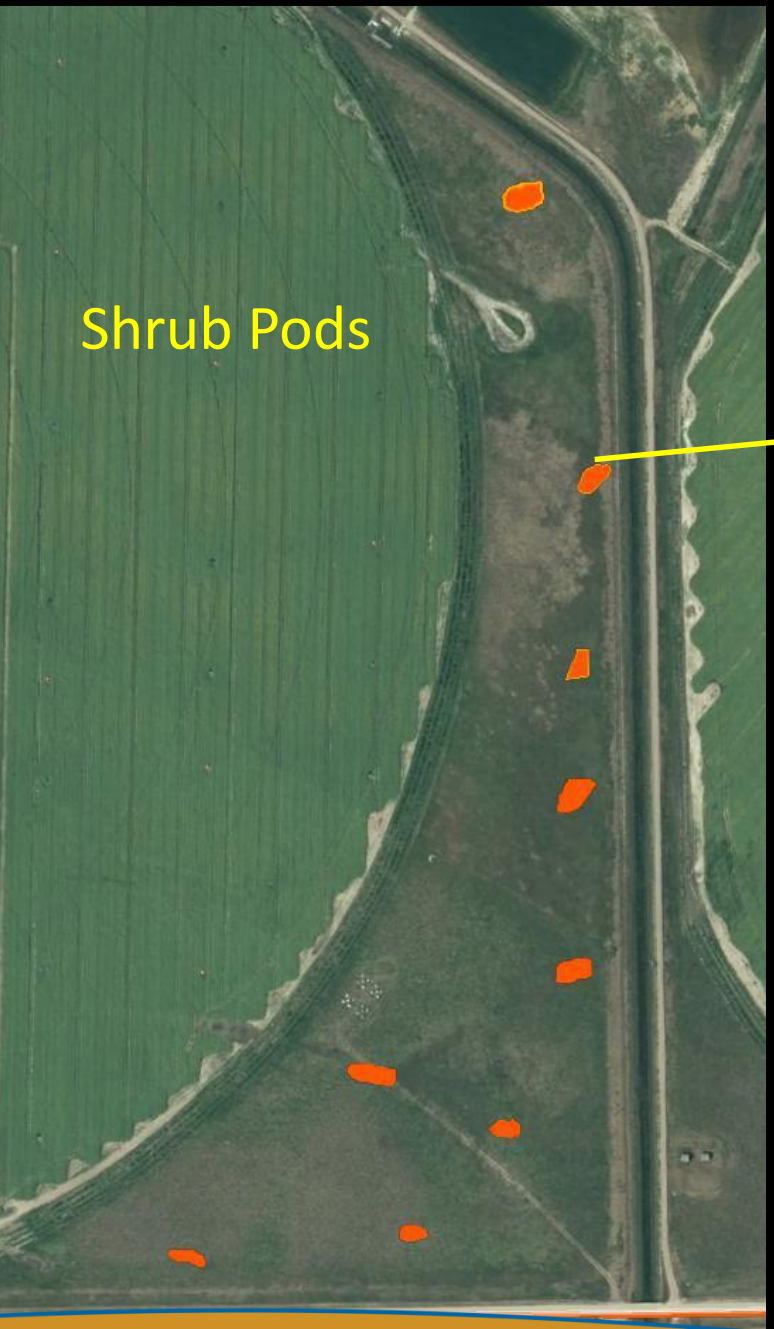
Create territory habitat

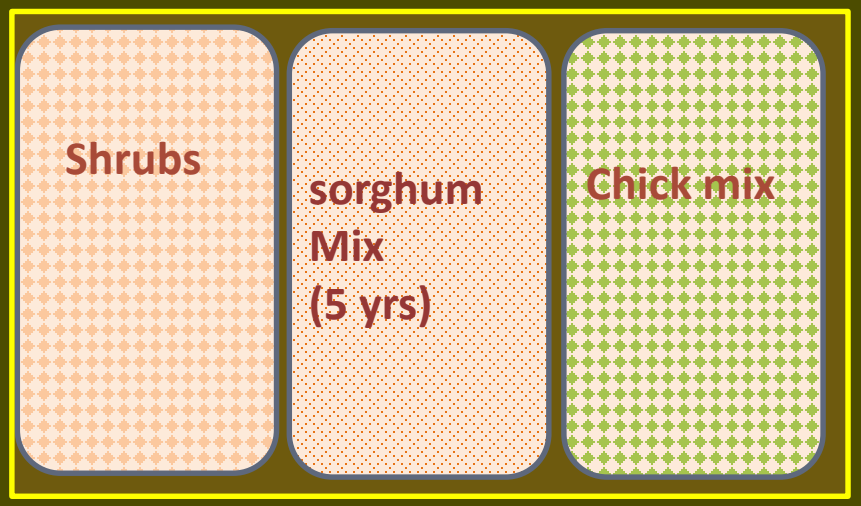


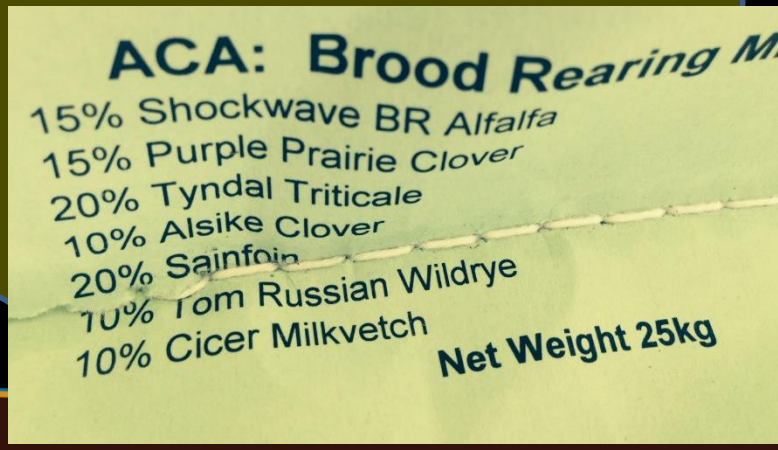
2016
13 km edge (sorghum mix)
~ 14 acres @12’ wide

Territory habitat

Territory habitat



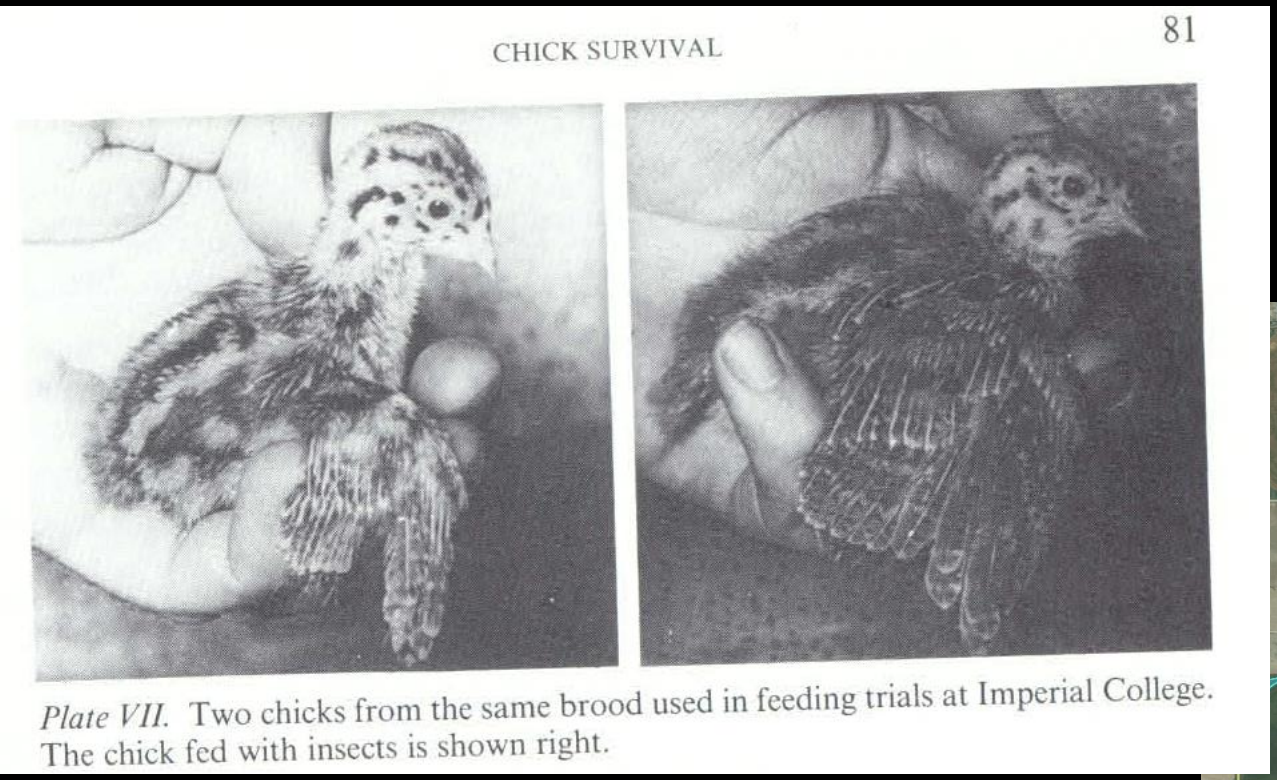




Chick habitat

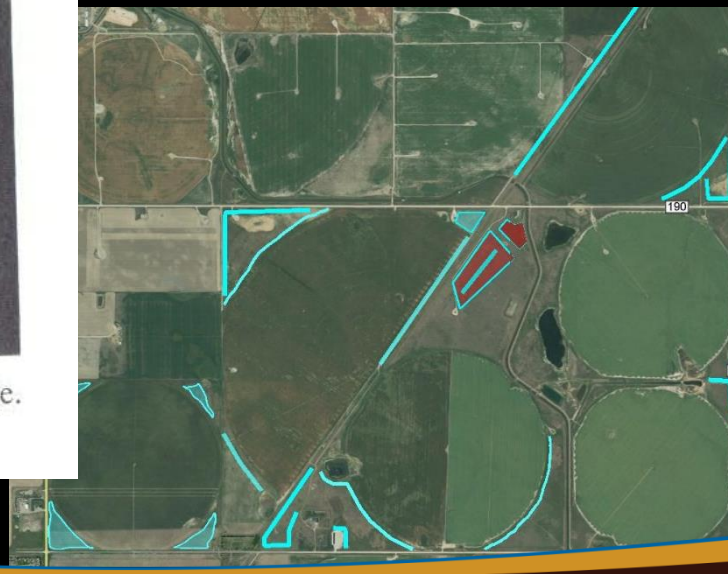
Chick survival

7.5 km chick mix - strips
~ 7 acres if 12’ wide



CHICK SURVIVAL 81

Plate VII. Two chicks from the same brood used in feeding trials at Imperial College. The chick fed with insects is shown right.

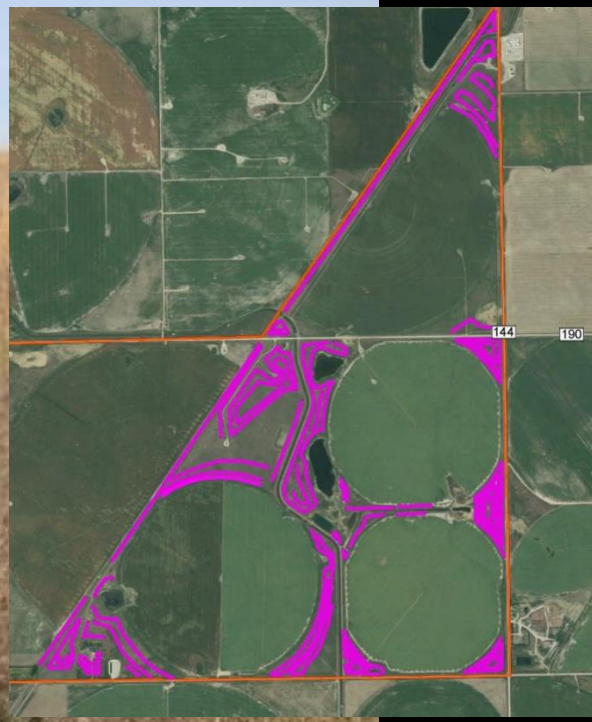


Within crop treatments

6 m crop standing

6 m chemical reduced

Chick survival



Predator management

Active vs passive

Passive

Top predators – guard duty

Great horned owl & Coyote

Reduce competition and control other species

mink
skunk
racoon
crow

magpie
merlin
red-tailed hawk
northern harrier

Harvest strategy

Main steps

1. Spring count - adults
2. Fall count - broods

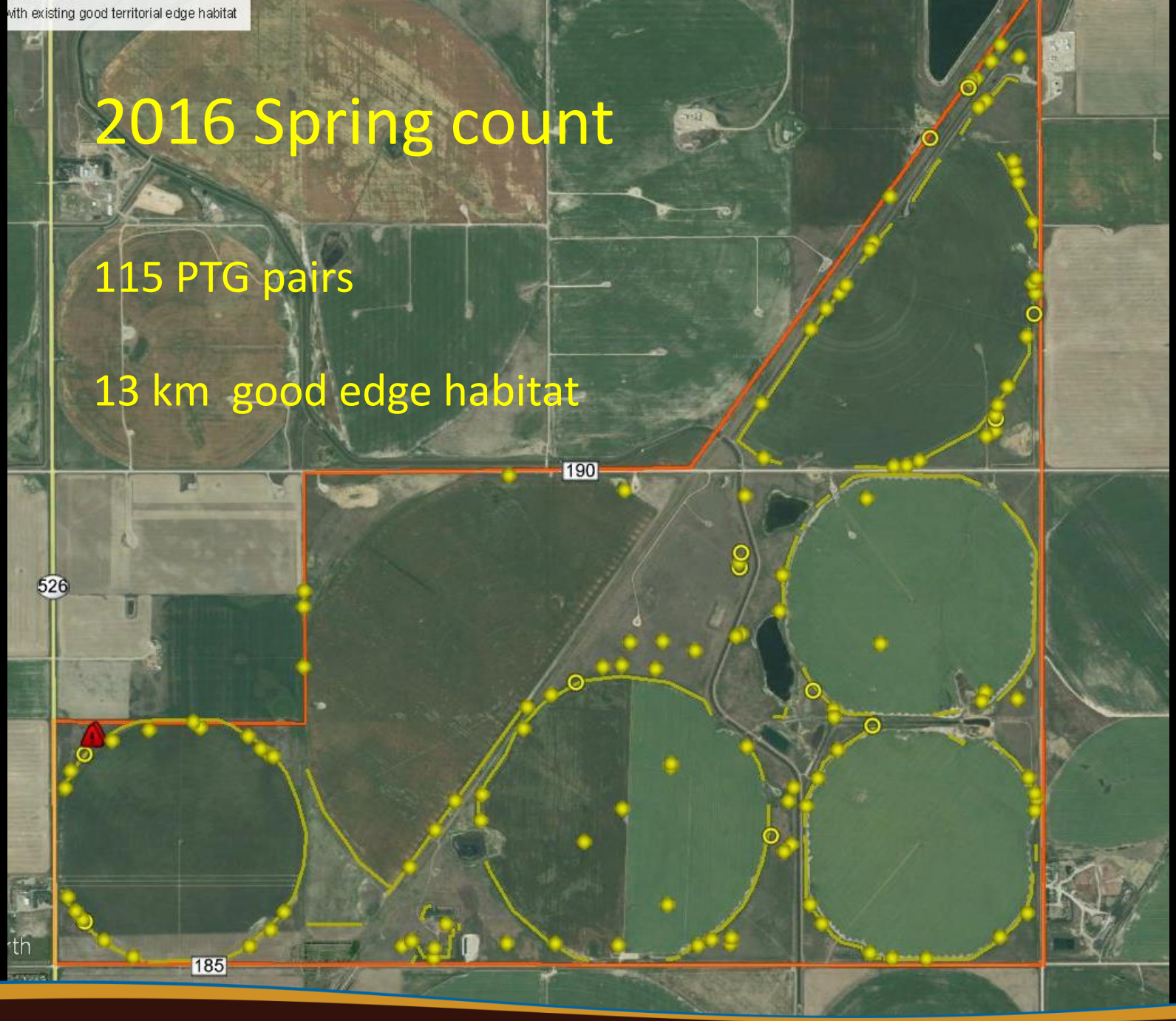
   - sub-sample - brood size

3. Estimate target density next spring
4. Harvest surplus (~ max 20%)

Partridge population goals

Harvest strategy

	2014	2015	2016	2017	2018	2019
Spring Pair	55	115	187	266	317	377
Pair km2	10	22	34	50	60	71
Fall count		775	1250	1750	2150	2500
Harvest 20% max		0	100	360	430	500
Add edge Habitat			13 km	6 km	6 km	
Add chick mix			7.5 km	TBD	TBD	



2016 Spring count

115 PTG pairs

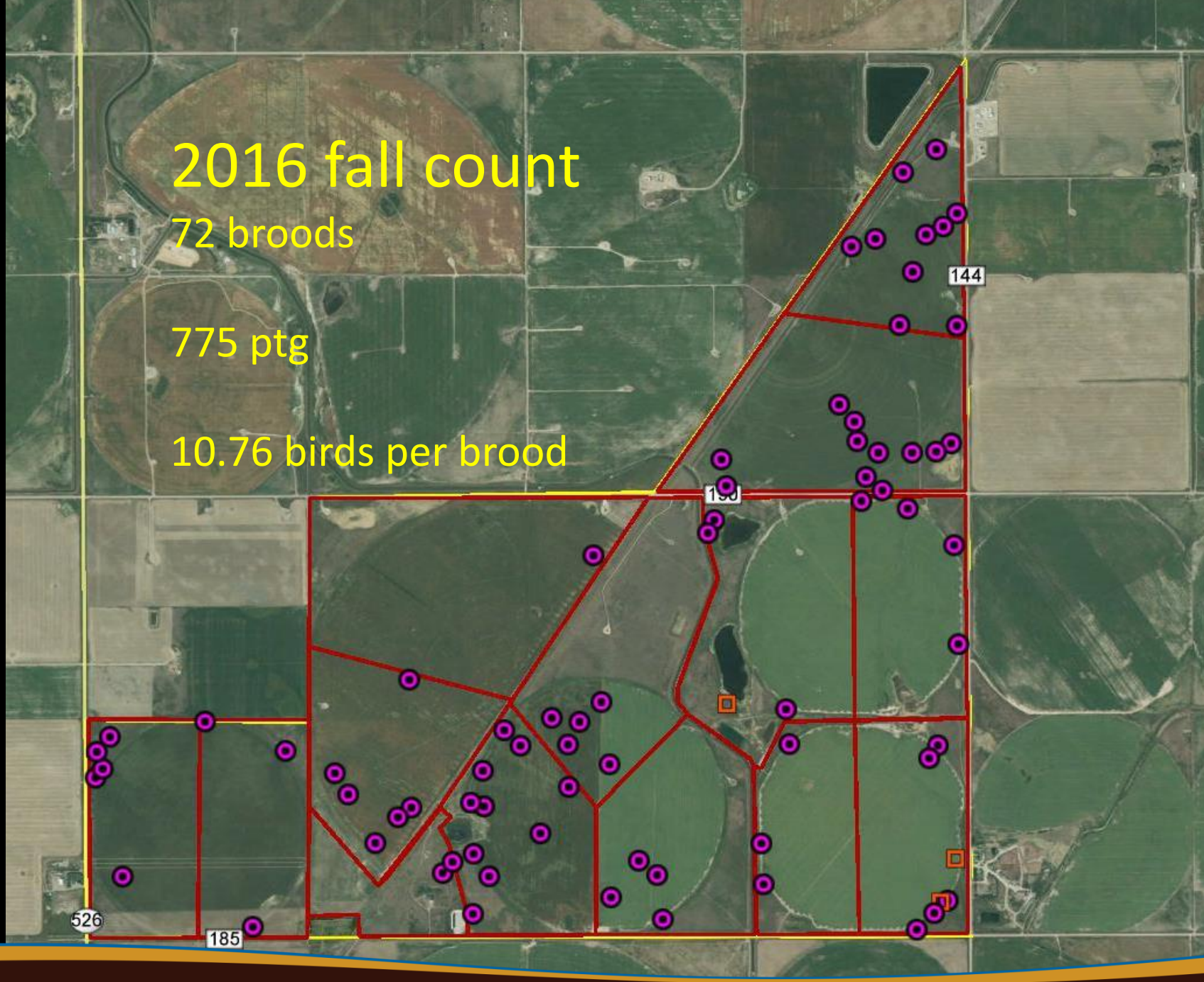
13 km good edge habitat

2016 fall count

72 broods

775 ptg

10.76 birds per brood



Establish pheasants

1. Hard release - 20 weeks

2. Soft release – 7-10 weeks

   a) Small pens

   b) Large pen

Establish pheasants

Small pen technique

7 weeks

Establish Pheasants

Large pen technique

7 weeks

Pheasant Survival

Hard release

Small pen

Large pen

Enchant Project

Haggins Family
Stamp Family
Alberta Conservation Association