

What herbicide to use for various weeds. - Bill Kleiman

5/8/2015

Sorted by common name

Weed common	Weed Scientific	Herbicide & Strategy	Comments.	Difficulty
asian bushclover	Lespedeza daurica	triclopyr so Crossbow, Element 3A. Dow says use: Milestone, PastureGard HL, Garlon 4 Ultra. Spot spray in June sweeps once plant is noticeable. Continue sweeps through July and into August.	transline does not work on Lespedeza. Hamilton uses Remedy(triclopyr) on L cuneata in summer and Cimarron Plus (metsulfuron met met..)in early fall.	High. Hard to find and keeps coming up from the seed bank.
autumn olive	Eleagnus	triclopyr: basal bark Element4, foliar triclopyr so use Crossbow, element 3A	basal bark works well	High. Where they are abundant they are hard to eradicate.
birdsfoot trefoil	Lotus corniculatus	Crossbow, Milestone, Transline, Element 3A. Spot spray plants. Boom large depauperate areas.		High. Seeds last a long time and come up annually for years after adults are all gone.
black locust	Robinia pseudoacacia	Dilute Roundup on all leaves. For big trees, use 5% Stalker in Garlon 4 on basal. In nice places, cut and treat with 50% Roundup.	At CCK planting there is amorpha bush which looks similar but no thorns, and C milkvetch is a similar but not woody.	Medium. Big clones are lot of mass and resprout easily.

bouncing bet	Saponaria officinalis	Been using but not happy with Crossbow or G3A or glyphosate but spray early in bloom or before bloom. Try Telar XP (Hauser) works well and has residual.	Add surfactant to get past wax. Requires multiple returns. Get all rosettes.	Medium. Seed bank is long lasting and plants hard to get at on creek banks.
briars	Rubus sp.	Krenite in fall.		Low. Annoyance on fire breaks.
buckthorn	Rhamnus	basal barn Garlon 4, foliar Crossbow or Element 3A. Basal bark is an efficient method.		Low. Our sandy silt loams don't support it well.
butter and eggs	Linaria vulgaris	Crossbow.		Low, but hard to extinguish.
Common St Johnswort	Hypericum perforatum	Milestone, Opensight		Low.
crown vetch	Coronilla varia	Transline 0.5%, Milestone	Check annually.	Medium. Few patches around but hard to extinguish.
day lilly	Hemerocallis fulva	Walters using 2% Habitat with 3% glyphosate. Roundup with Stinger added.	Add surfactant to get past wax. Requires multiple returns.	Medium. Requires numerous returns.

honeysuckle	Lonicera sp	Basal bark Garlon 4 when leaves are fully emerged gave 100% control. Or 40% Roundup or garlon 4 on cut stems. Foliar 5% Roundup on resprouts after fire works well too. (MCCD and Walters likes foliar Escort 10oz/3 g water)	Dormant season basal bark gives good control too.	Hard. Does not die readily from foliar sprays, and loves our soils.
hounds tongue	Cynoglossum officinale	Crossbow should work, Milestone.		Low. Nuisance.
king devil	Hieracium pratense	Crossbow or Element 3a, Milestone	Haul out flower in a bag. Dispose in kitchen trash.	Medium. Seed blow in the wind and hard to find them all annually.
leafy spurge	Euphorbia eschella	Plateau [imazapic] Apply in spring blooms and return in fall. This is not imazapyr. See article. Dow suggests Tordon.	blooms June and late August	Hard. We have little but keeps coming back.
mulberry	Morus alba	Garlon 4 works well. triclopyr so Crossbow or Element 3A	transline does not work	Low. A problem in certain areas where it is abundant.
phragmites	Phragmites australis	Walters using 1-2% Habitat with 2-3% glyphosate.		Low as we have none currently, but it was hard to eradicate.
poison hemlock	Conium maculatum	Dow suggests Opensight. Walters says Escort. Telar XP works well (Hauser). Spray before flower if possible.	Blooms in June	increasing on Franklin Creek

red clover	Trifolium pratense	Transline, Crossbow, Element 3A		A problem in new prairie plantings.
reed canary grass	Phalaris arundinacea	Poast Plus or Roundup in dense stands. Walters adds 1% Habitat to 2% glyphosate. (MCCD uses Intensity which does not harm sedges. ) [we are about to try Arrow/intensity w clethodim as ai.]	Grass herbicides way to go as sedges and forbs come back strong.	Hard. Requires annually work.
Rubus	Rubus sp.	Milestone, Opensight, Garlon 4 Ultra, Krenite.		Control only on fire breaks
spotted knapweed	Centaurea maculata	Milestone. Opensight. Transline. Have used Crossbow.		Medium. We eradicated it, or almost, at HLP.
sweet clovers	Melilotus alba/officinalis	Crossbow, Milestone, Transline, Element 3A. Spade out plants anytime. Haul plants after flowering is over to remove seed source. Spray plants under two foot tall. Mow big patches when in full bloom.	Walters says Transline works well.	Hard. Long seed bank.
Vetch	Vicia	Milestone, Transline.		Low
wild parsnip	Sativa pastinaca	Element 3A before it bolts, spade it after. Dow suggests Opensight. Spading works fine but haul out plants after full flowering.	Sap on skin gives sun burn boils.	Low.
willow	Salix sp.	Cut and treat stems 50% glyphosate. Basal bark G4 should work. Foliar G3 or Crossbow.		

## HERBICIDE USE:

5/8/2015 BK

**Take the time at the start of each season to get to know the equipment and chemicals currently in use (Some chemicals and names change each year so make sure you read the herbicide label of the chemical you are interested in using) Don't waste the expensive herbicides. A higher concentration does not necessarily do better. You want the plant to die slowly while the plant take in the herbicide. For stubborn plants re-spraying may be necessary.**

### **General Description of Use:**

#### **Roundup, Glystar Plus (glyphosate with a surfactant added)**

Kills anything green. Don't use over water. Rain-fast is a half hour.

#### **Rodeo (glyphosate with NO surfactant added) –**

Kills anything green. Good for spraying over water and in wetlands. However you can use it and add some surfactant if you are spraying anything besides plants over water.

#### **Element 3A, Garlon 3A (amine-Triclopyr that is water soluble)–**

Broadleaf herbicide that kills most brush, trees, and forbs/flowers. Does not kill grass, sedges, or rushes. Water based. Does not work well on honeysuckle. Perhaps good on mulberry. Less aggressive than Element 4.

#### **Crossbow (ester-Triclopyr with 2-4-D water soluble) –**

Broadleaf herbicide which is a mix of the ester formulation of triclopyr and 2,4-D. Smells pungent. Water based and produces a milky look. Very powerful and will kill most any forb or shrub, but it will kill good things you overspray. Perhaps use less aggressive Element 3A.

#### **Garlon 4 (ester-Triclopyr in mineral oil. Oil soluble ) –**

For killing woody species. Applied as a spray paint to bark (basal bark) or to cut stems. The main oil based herbicide we use. We mix it with mineral oil and dye. We use 17% so this is rather concentrated. Considered caustic in your eyes as a concentrate. Not a foliar spray. Use red Birchmeier packs. Ask for instruction. We add Stinger for black locust.

#### **Transline (Clopyralid)-**

A broadleaf herbicide that is very good at killing Canada thistle and birdsfoot trefoil, and red clover. For thistle, applied early in plant growth. It takes several weeks to kill roots, but plant bends over after a few hours. We think it works well

on birdsfoot trefoil. Use only 0.8 oz per gallon of water. Has 10 month residual effect in soil. Don't plant forbs into area for 10 months. Transline does not kill Lespedeza.

**Poast Plus - (Sethoxydim with a surfactant added)** –

Kills grasses slowly. Does not kill sedges, rushes, forbs! Good for use when grass is actively growing. For reed canary this is spring and fall. Smells bad. Has surfactant so should not be used over water.

**Poast – (Sethoxydim with no surfactant)** -

Has no surfactant so can be used over water. Kills grasses but does not kill sedges, rushes, forbs! Good for use when grass is actively growing. For reed canary this is spring and fall. Smells bad.

**Krenite (Fosamine)** - A bud inhibitor for woody plants. Will kill multiflora rose if whole plant is sprayed. Controls Rubus well. Spray late in summer, end of August and September. Spray when woody plants have formed their buds. May effect other broadleaves so likely use in lower quality areas.

**Panoramic by Alligare (imazapic)** – Used on leafy spurge in spring with a followup in fall (says K Rohling).

**Dimension 2EW –(Dithiopyr).** Spray this on soil in the spring and it will give a season long soil residual...meaning it will kill seeds that germinate into cotyledons, but it won't kill perennial plants that emerging from their roots. We are using this in an area full of sweet clover seed. Talk to Bill or Cody before using this.

**Milestone VM (amiopyralid)**– A broadleaf herbicide with a long soil residual. So broadleaf seeds emerging to cotyletons die on contact with herbicide in the soil. Good for areas that you want to be grass/sedge/rush only. Do not use on good prairie. Ask for instruction.

**Telar XP granular (chlorsulfuron)** – A high residual broadleaf herbicide for special purposes. Try on bouncing bet. Can be applied pre or post emergence.

**Dye** - We add blue dye to help see where we have sprayed and where we have spilled. The dye is washed out and fades from clothes after a few days.

**Stalker (imazapyr)** –

We add this to Element4 for basal bark application to black locust.

**Habitat (imazapyr) –**

Same active ingredient as Stalker. Is this the same formulation? Habitat used with glyphosate by Walters on phragmites.

**Surfactant** – The product we stock presently is Chem guard or Chem80. Surfactant help the herbicide stick and absorb into the plant. Especially good for plants with waxy leaves like bouncing bet, day lilly, and cattail.

**Dyne-Amic** – A modified vegetable oil surfactant blend. Use instead of Non ionic surfactant. Use w Poast for RCG at 1-2 oz gallon.

**General safety:**

1. Read and follow the label on the herbicide.
2. Spray when winds are low to reduce over-spray and drift.
3. Bring out the herbicide clean up kit which has eye flush bottles and other clean up equipment.
4. Bring a jug of clean water for rinsing your hands and for an emergency eye wash.
5. Take appropriate measures to keep herbicide off your skin and in your eyes. Wear gloves and eye protection when working with the concentrate. Be clean. Flush the equipment, your hands, the truck bed with water.
6. Wash your hands when you are finished and at breaks. Clean water is good for you.
7. Rinse out the measuring cup into the tank you are filling, do this three times.

C:\data\Stewardship\WEEDS\HERBICIDE

<b>% solution you want</b>	<b>Number oz per 1 gallon</b>	<b>Active Ingredient</b>	<b>Trade Name</b>	<b>Use</b>
<b>0.1%</b>	<b>0.2 oz</b>	<b>Surfactant</b>	<b>Chem-guard</b>	<b>Add to any herbicide for more penetration</b>
<b>0.1%</b>	<b>0.25 oz</b>	<b>Marker dye</b>	<b>Hi-Light blue</b>	<b>Colors solution</b>
<b>0.25%</b>	<b>0.5 oz</b>	<b>Dithiopyr</b>	<b>Dimension 2EW</b>	<b>Pre-immurgent broadleaf</b>
<b>0.5 %</b>	<b>0.8 oz</b>	<b>Clopyralid</b>	<b>Transline</b>	<b>Canada thistle, BFT</b>
<b>0.6%</b>	<b>0.9 oz</b>	<b>aminopyralid</b>	<b>Milestone</b>	<b>Broadleaf with soil residual</b>
<b>1.5 %</b>	<b>2 oz</b>	<b>Glyphosate</b>	<b>Glystar, Glypro, Rodeo, Roundup</b>	<b>Reed canary, phragmites, kills all plants</b>
<b>1.5 %</b>	<b>2 oz</b>	<b>Glyphosate (no surfactant)</b>	<b>Glypro</b>	<b>Reed canary, phragmites, kills all plants</b>
<b>2 %</b>	<b>2.5 oz</b>	<b>Triclopyr</b>	<b>Crossbow, Element 3A, Garlon 3A</b>	<b>All broadleaved plants (flowers),BFT</b>
<b>2%</b>	<b>2.5 oz</b>	<b>fosamine</b>	<b>Krenite</b>	<b>Woody plant that are in bud. Apply early fall.</b>
<b>2.5%</b>	<b>3.5 oz</b>	<b>Sethoxydim</b>	<b>Poast, Poast Plus (with surfactant)</b>	<b>Grasses like Reed Canary when actively growing spring or fall</b>
<b>16%</b>	<b>2.5 gall in 12.5 g oil</b>	<b>Tricopyr oil based</b>	<b>Element 4, Garlon 4</b>	<b>Woody plants for basal bark and cut stem</b>



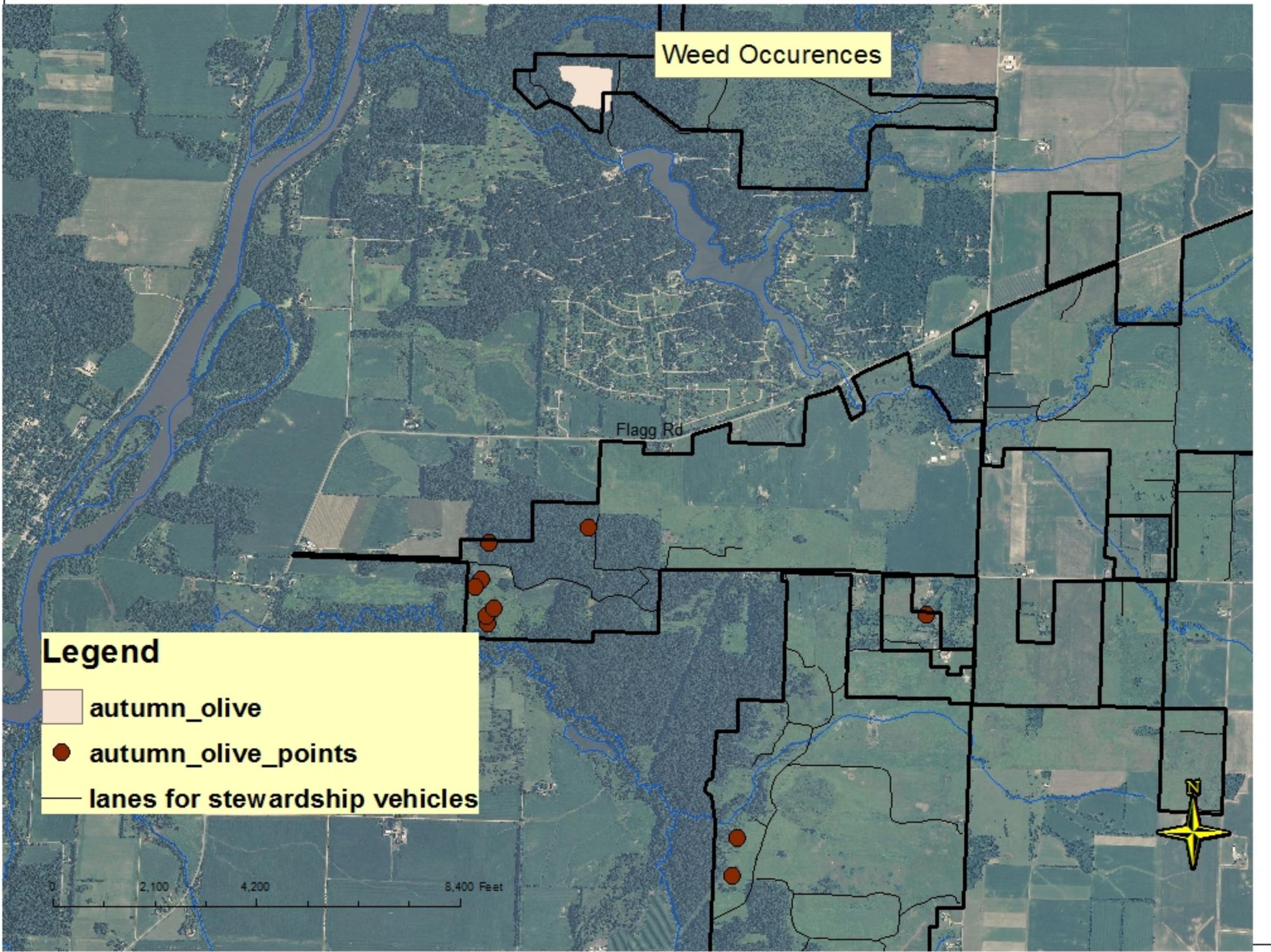
Weed Occurrences

Legend

- autumn\_olive
- autumn\_olive\_points
- lanes for stewardship vehicles

Flagg Rd

0 2,100 4,200 8,400 Feet



Weed occurrences

Legend

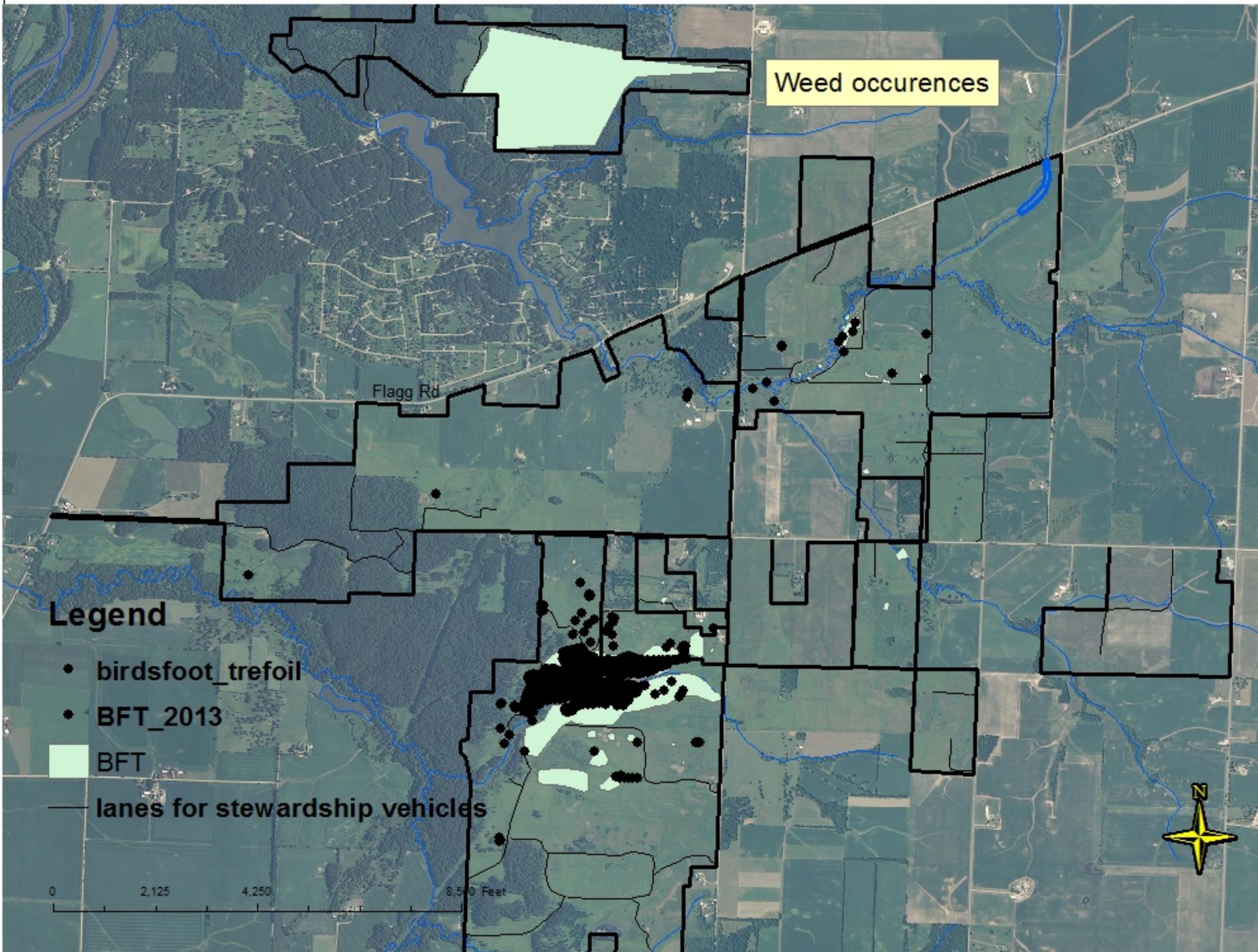
• birdsfoot\_trefoil

• BFT\_2013

■ BFT

— lanes for stewardship vehicles

0 2,125 4,250 8,500 Feet



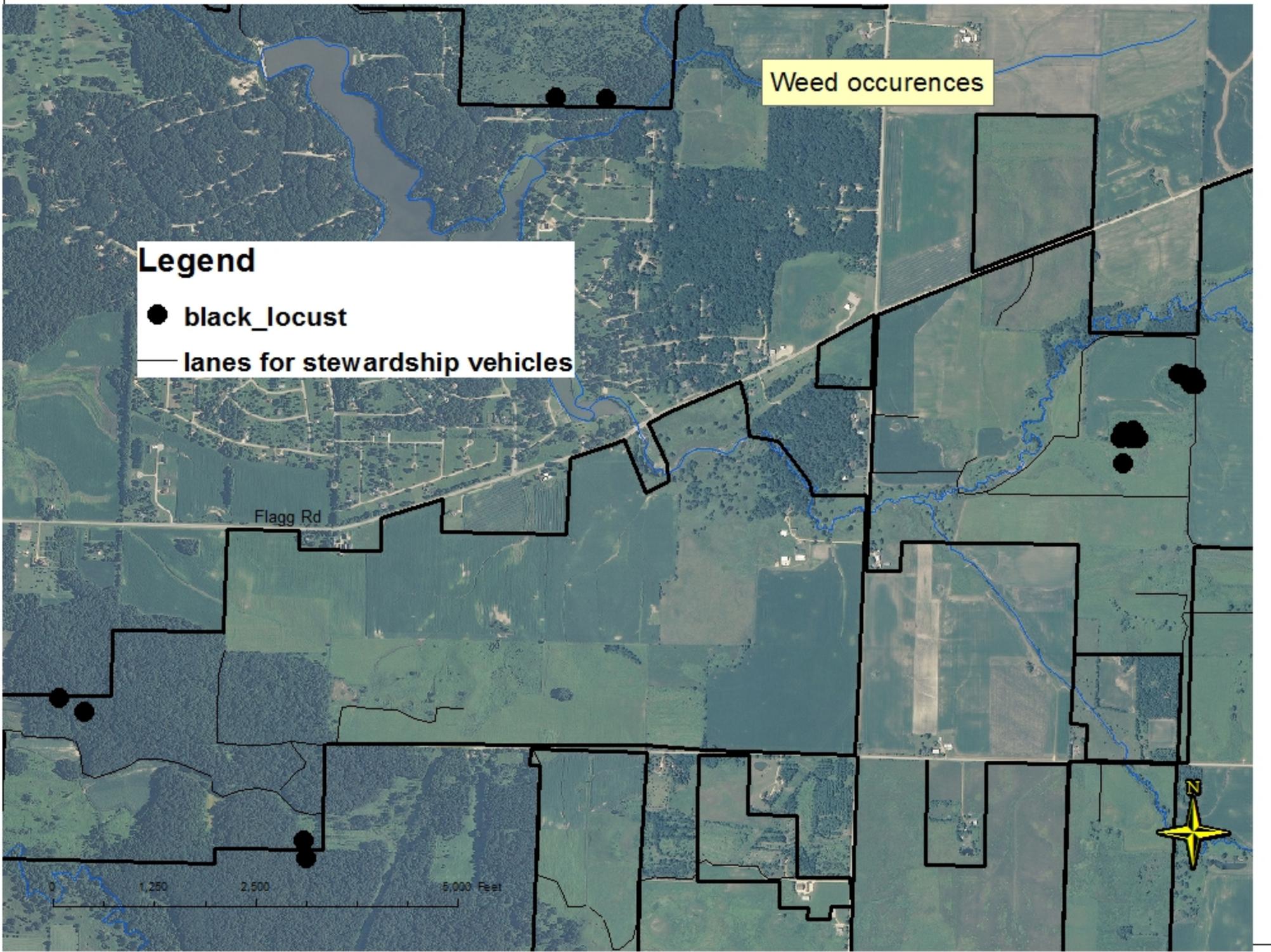
Weed occurrences

**Legend**

- black\_locust
- lanes for stewardship vehicles

Flagg Rd

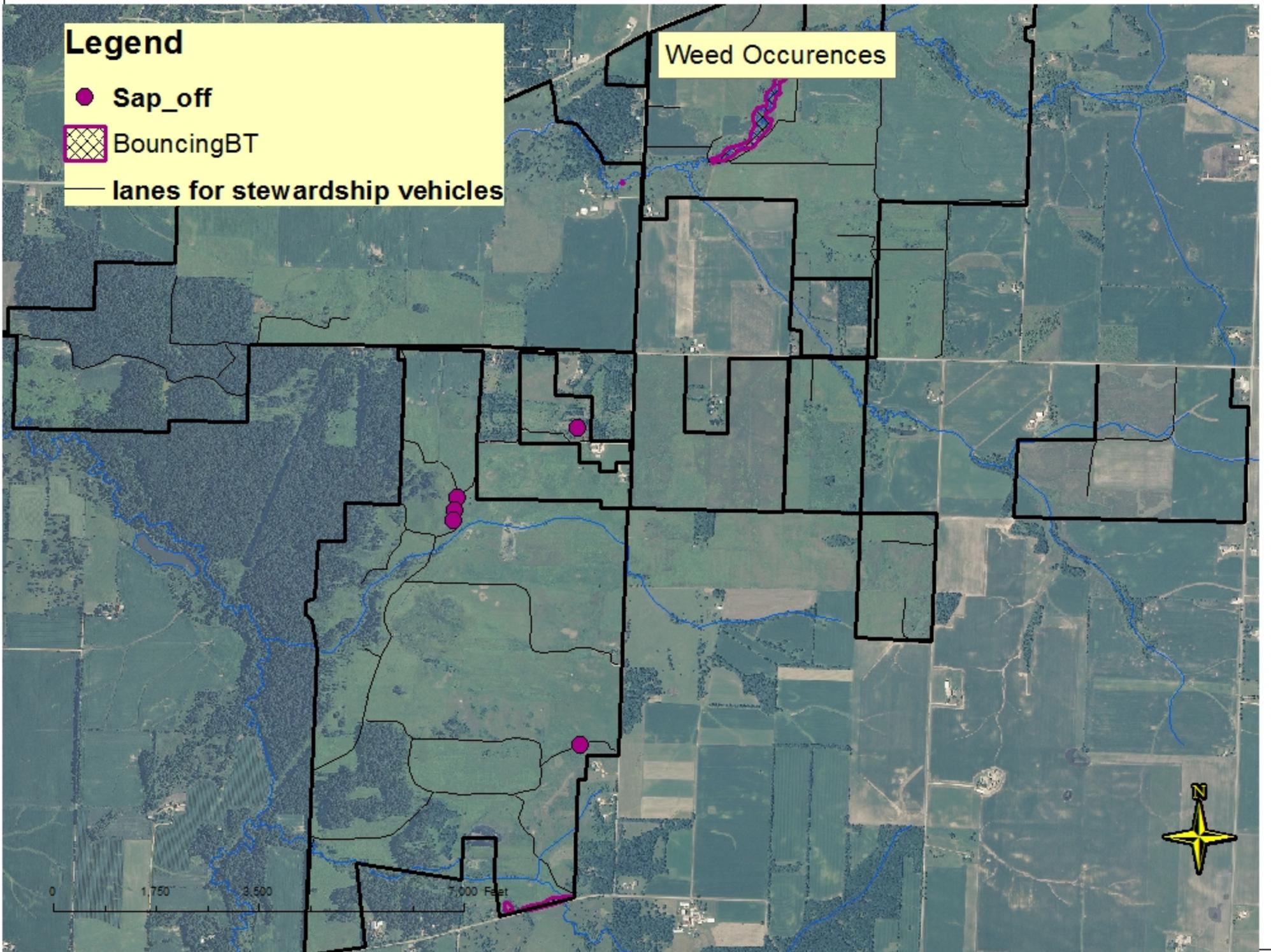
0 1,250 2,500 5,000 Feet



# Legend

- Sap\_off
- ▨ BouncingBT
- lanes for stewardship vehicles

# Weed Occurences

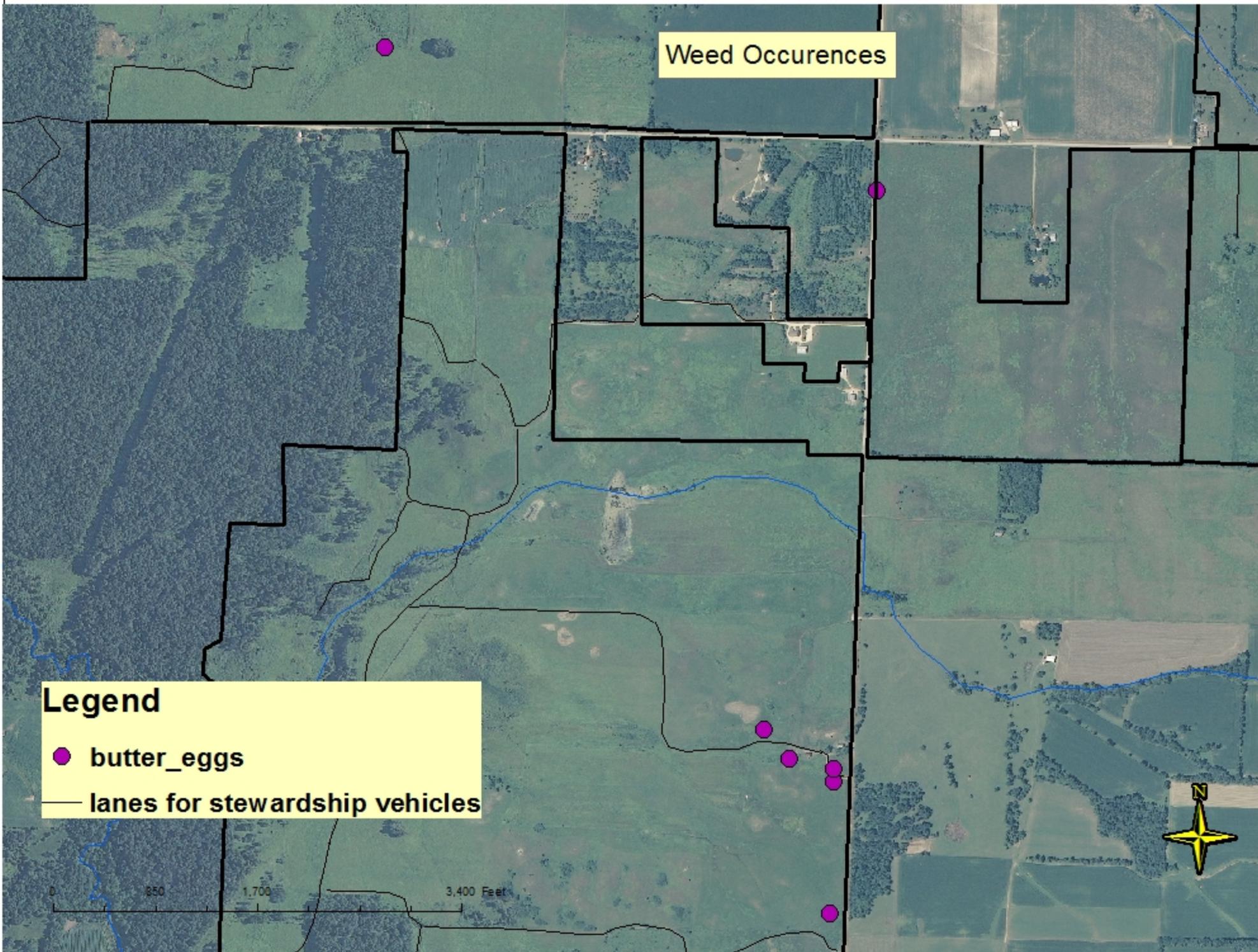


Weed Occurences

**Legend**

- butter\_eggs
- lanes for stewardship vehicles

0 850 1,700 3,400 Feet



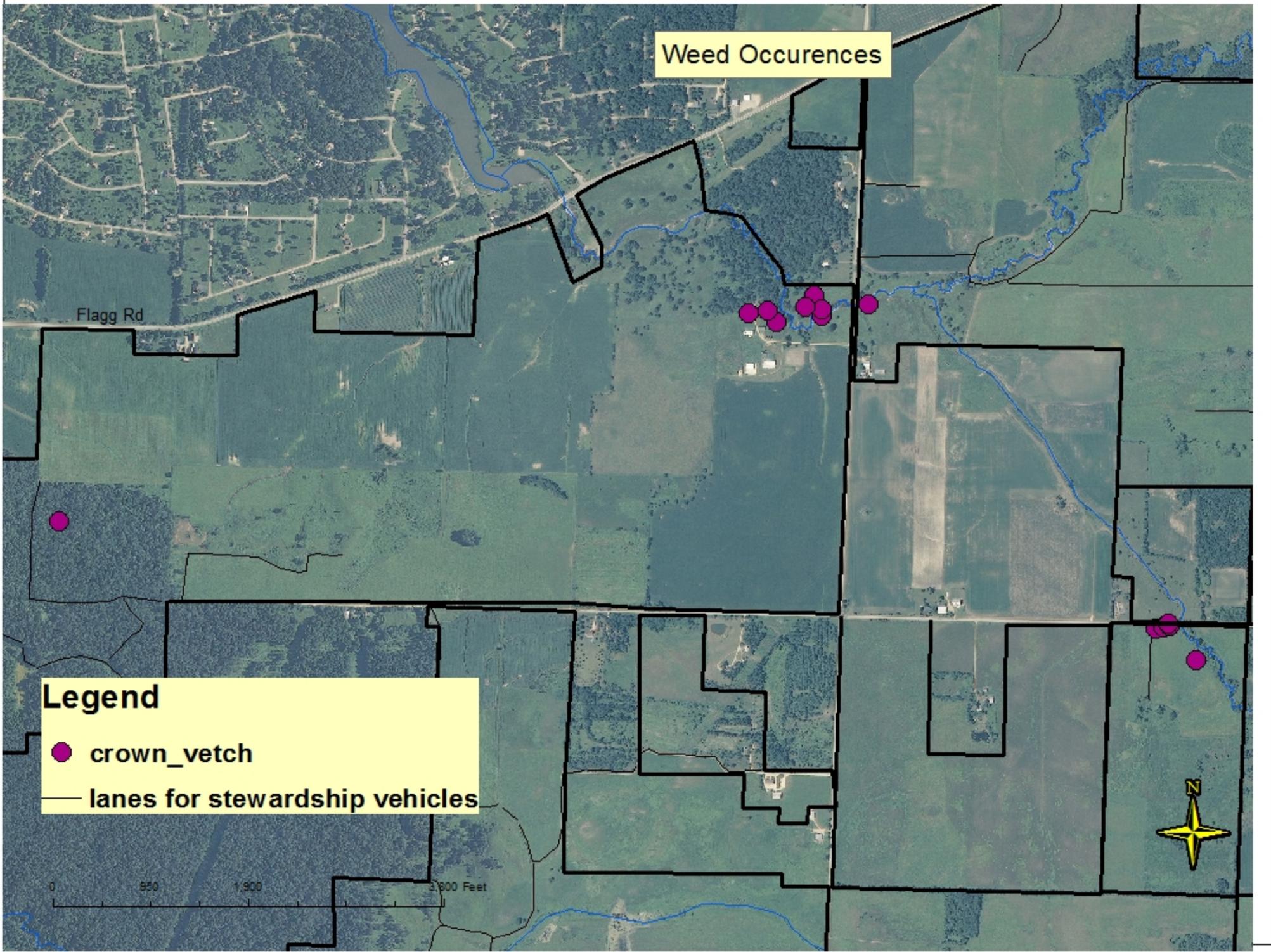
Weed Occurrences

Flagg Rd

**Legend**

- crown\_vetch
- lanes for stewardship vehicles

0 550 1,100 1,650 2,200 Feet



# Weed Occurences

**Legend**

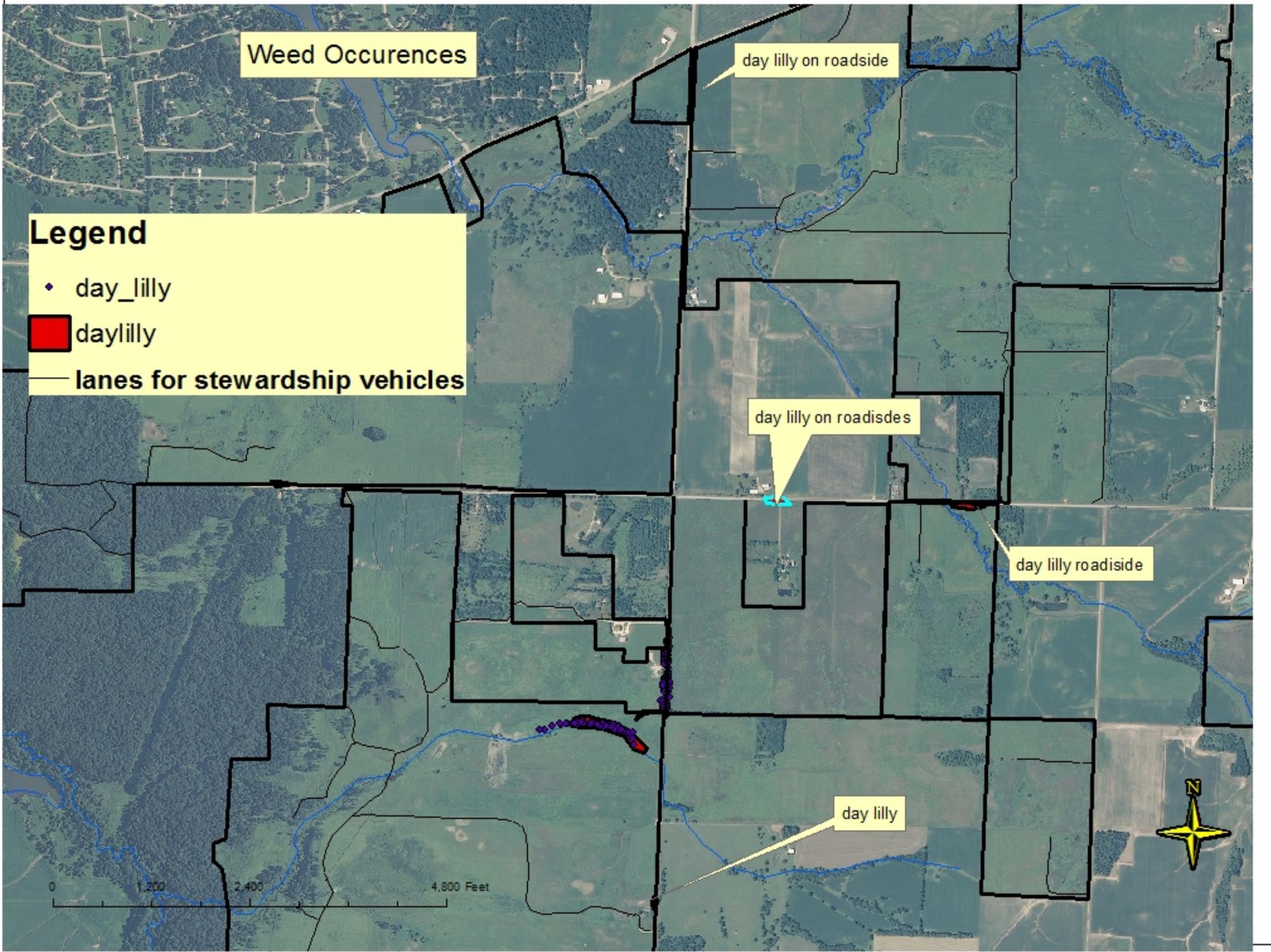
- ◆ day\_lilly
- daylilly
- lanes for stewardship vehicles

day lilly on roadside

day lilly on roadsides

day lilly roadside

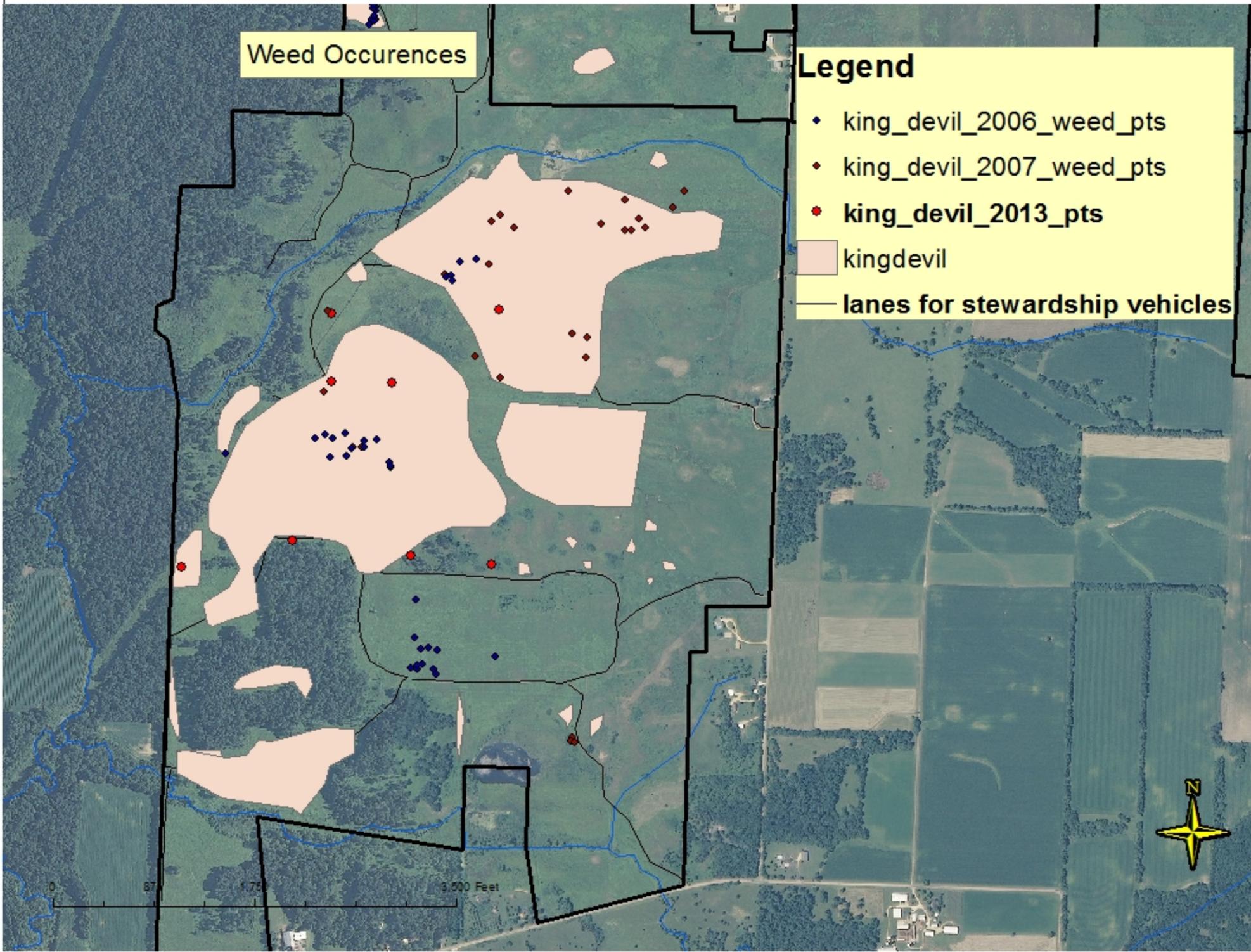
day lilly



Weed Occurences

Legend

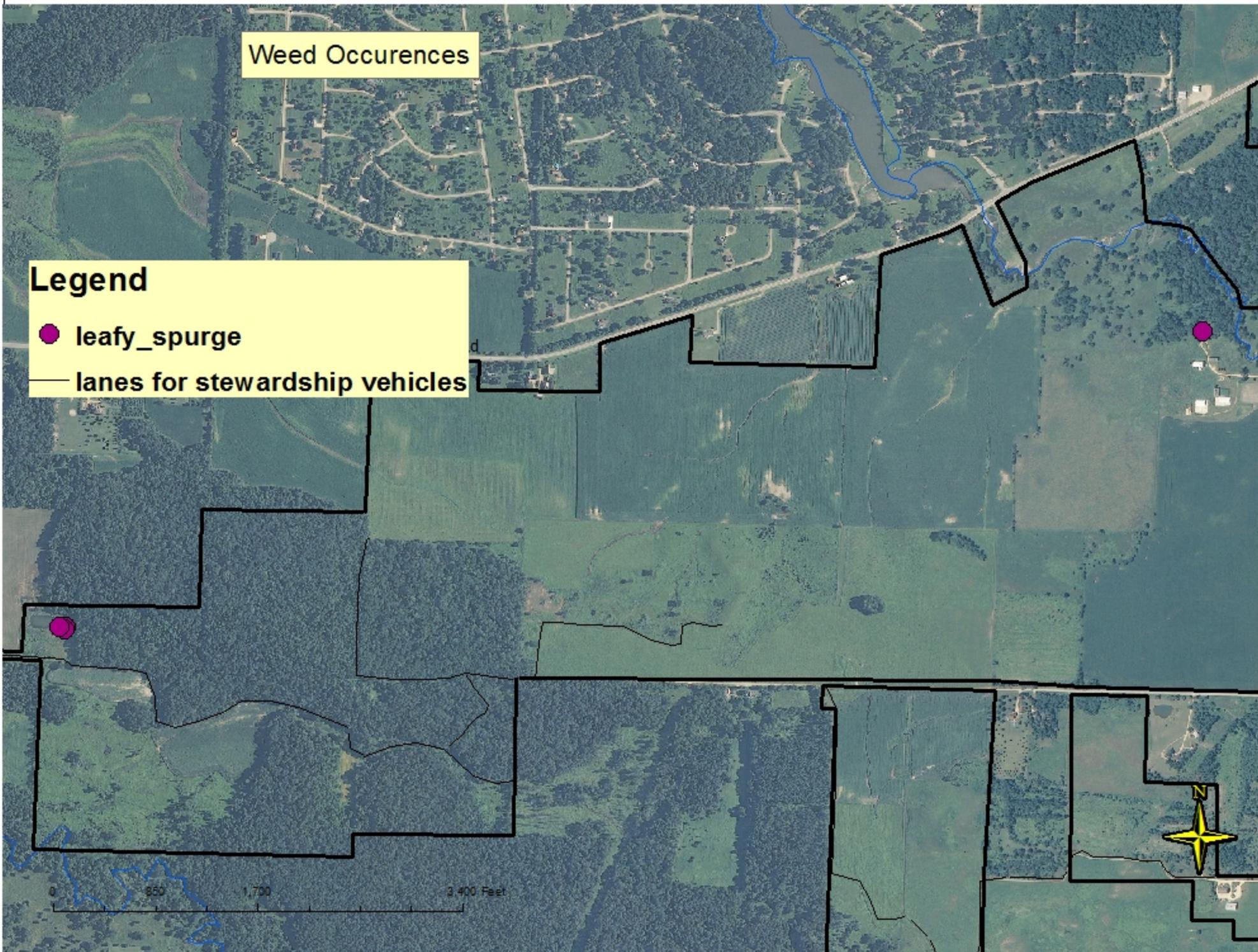
- ◆ king\_devil\_2006\_weed\_pts
- ◆ king\_devil\_2007\_weed\_pts
- ◆ king\_devil\_2013\_pts
- kingdevil
- lanes for stewardship vehicles



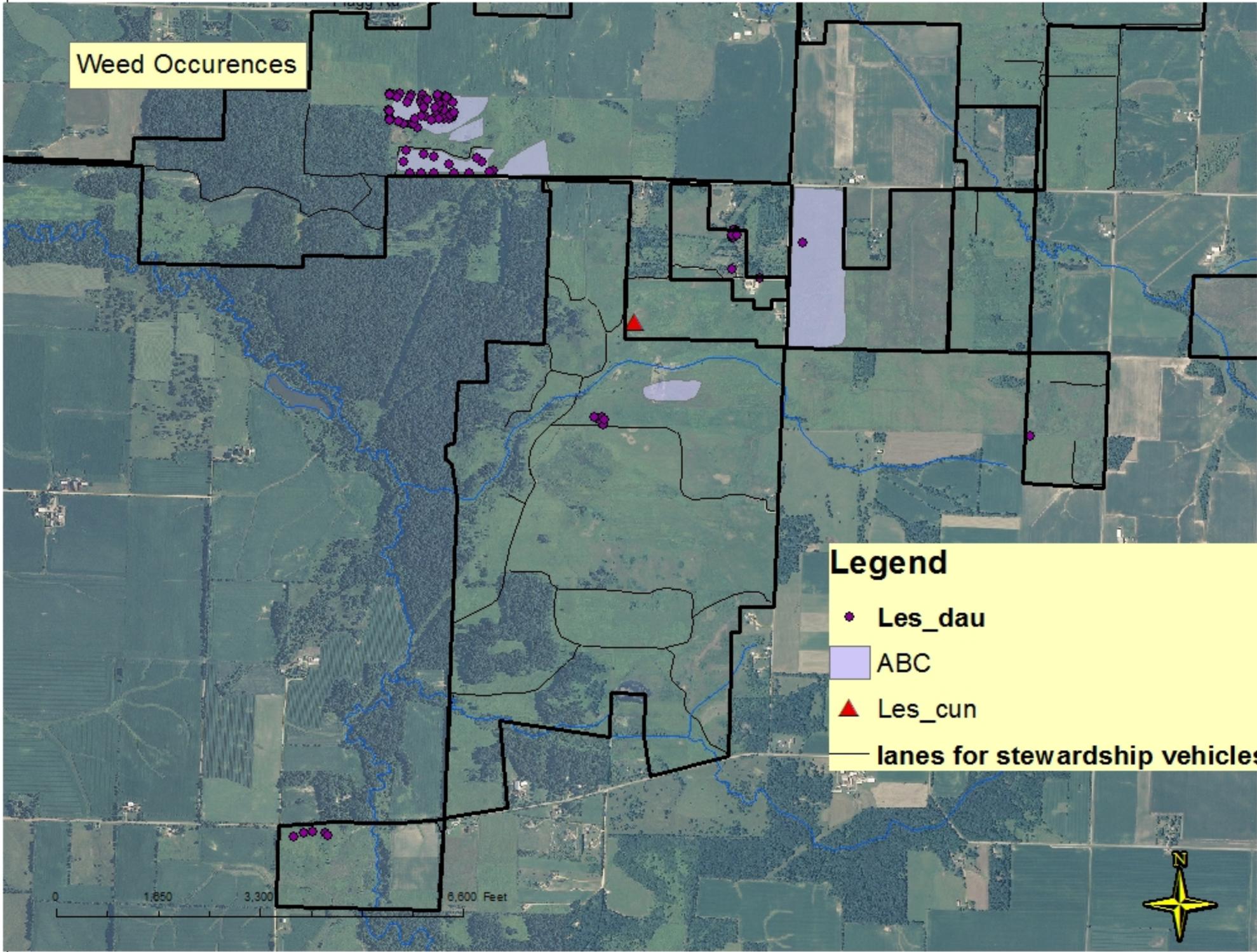
Weed Occurences

**Legend**

- leafy\_spurge
- lanes for stewardship vehicles



Weed Occurences



Legend

• Les\_dau

ABC

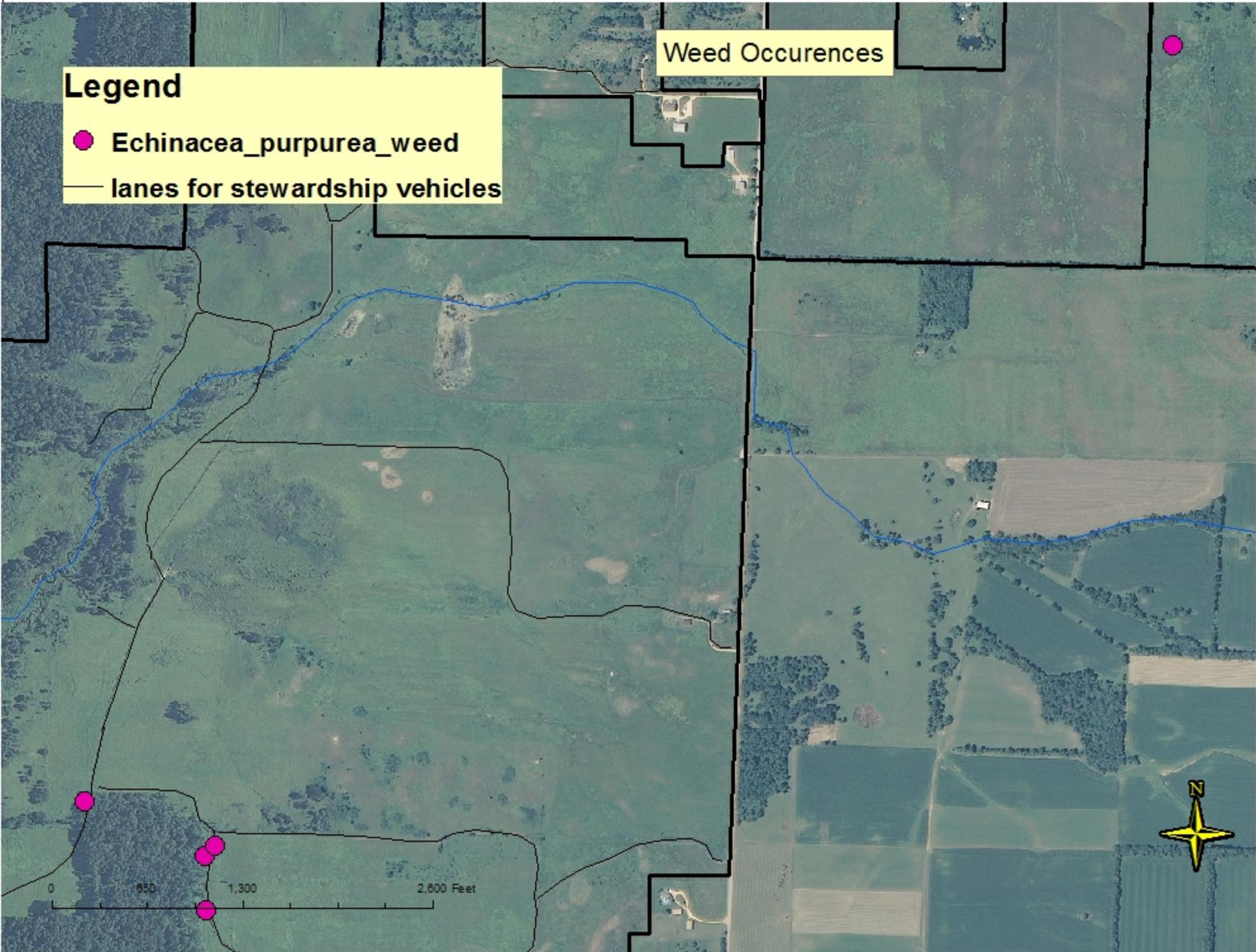
▲ Les\_cun

lanes for stewardship vehicles

Weed Occurrences

**Legend**

- Echinacea\_purpurea\_weed
- lanes for stewardship vehicles



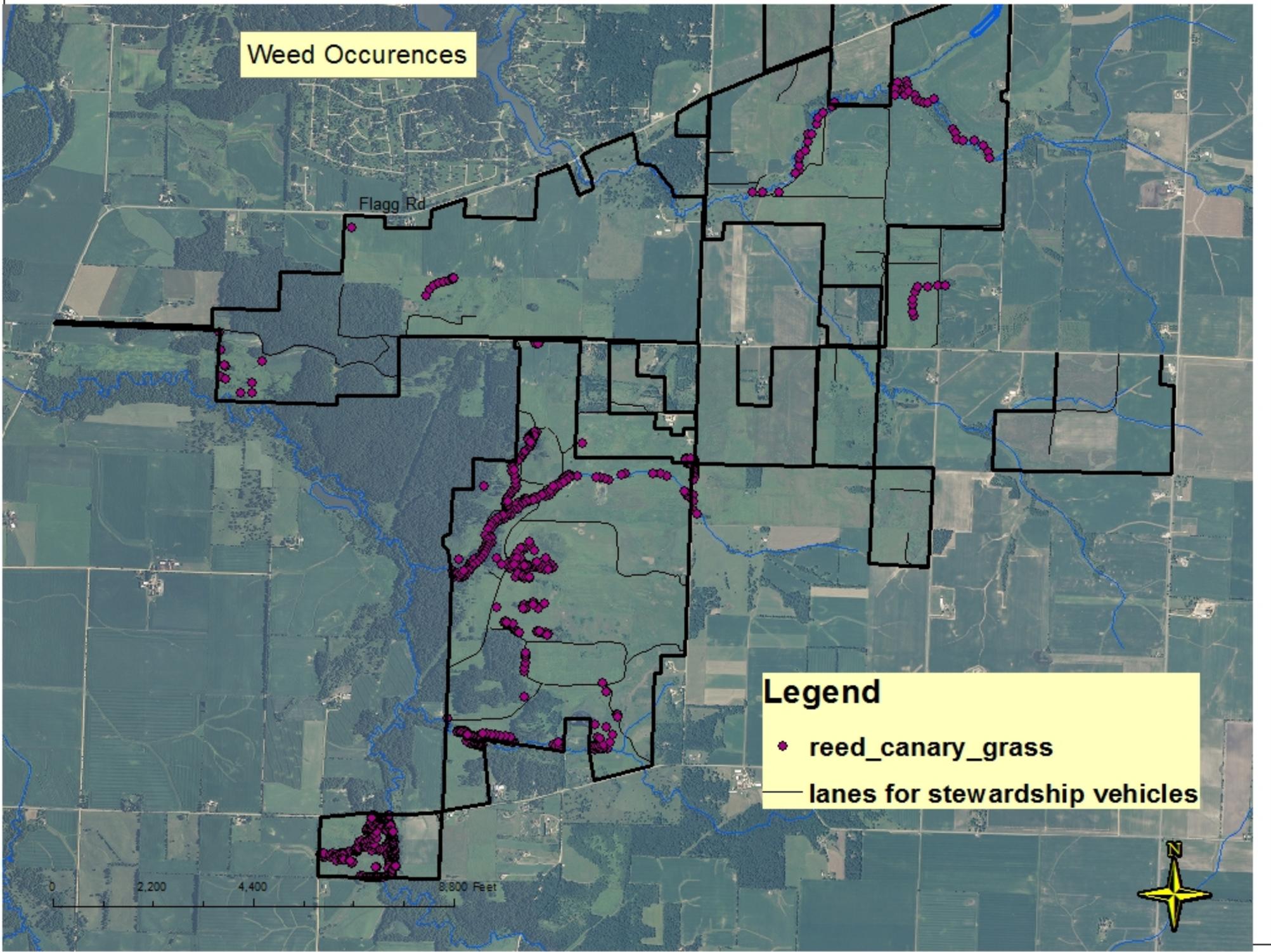
Weed Occurences

Flagg Rd

**Legend**

- reed\_canary\_grass
- lanes for stewardship vehicles

0 2,200 4,400 8,800 Feet

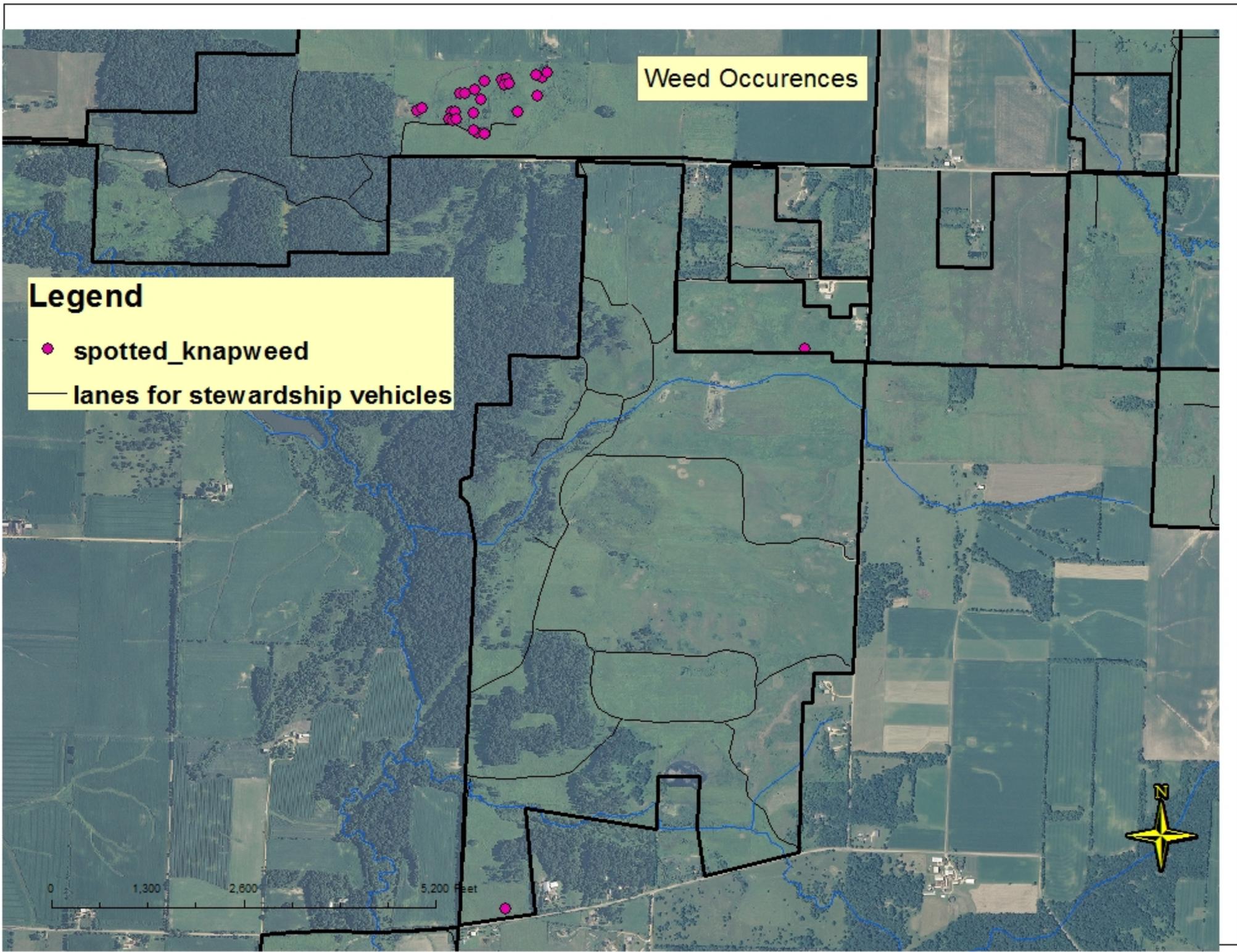


Weed Occurrences

Legend

- spotted\_knapweed
- lanes for stewardship vehicles

0 1,300 2,600 5,200 Feet

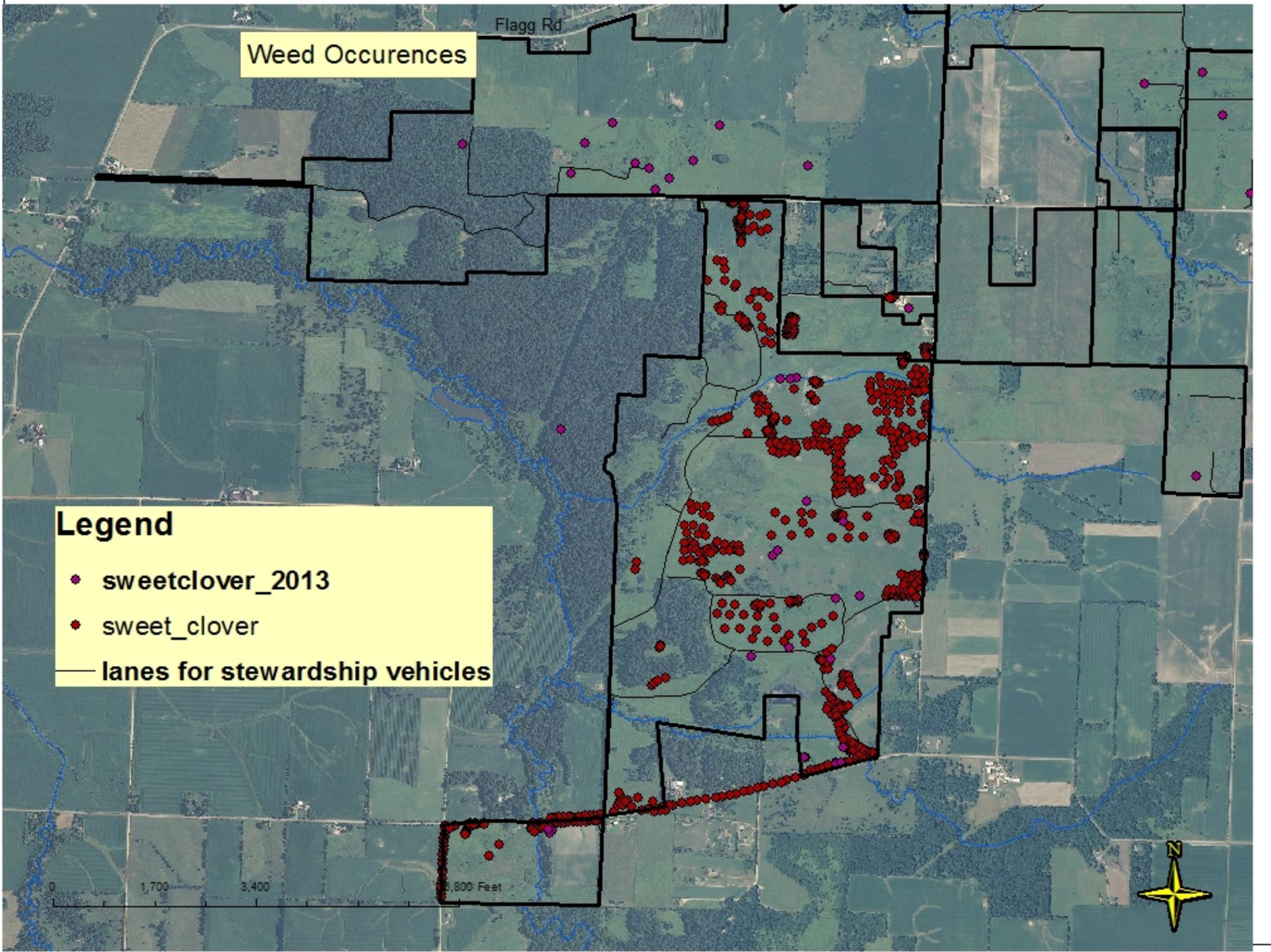


**Weed Occurences**

Flagg Rd

- Legend**
- sweetclover\_2013
  - sweet\_clover
  - lanes for stewardship vehicles

0 1,700 3,400 5,100 Feet



Weed occurrences

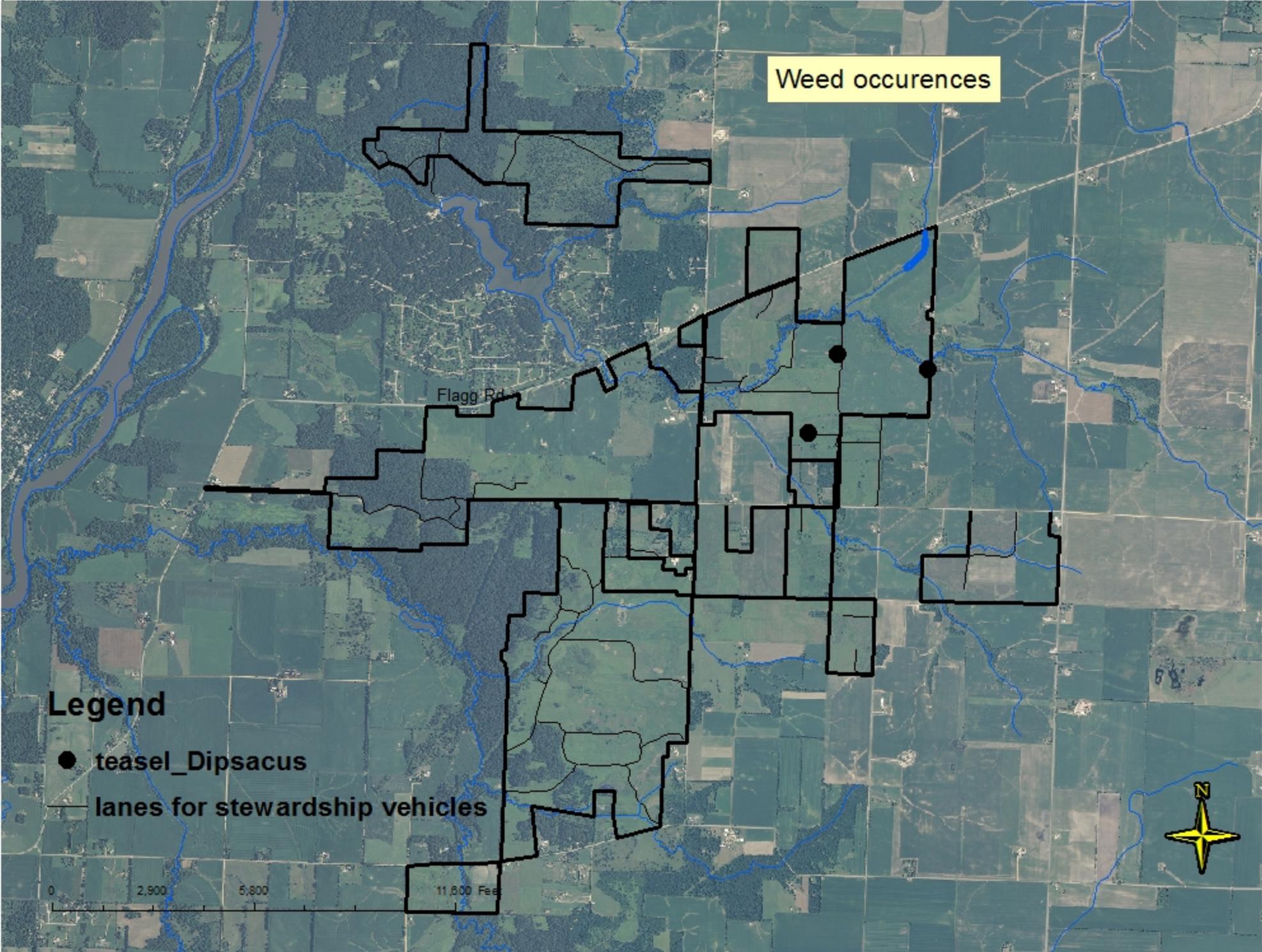
Flagg Rd

**Legend**

● teasel\_Dipsacus

— lanes for stewardship vehicles

0 2,900 5,800 11,600 Feet



Weed Occurences

- Legend**
- ◆ wild\_parsnip
  - lanes for stewardship vehicles

0 1,650 3,300 6,600 Feet

