



Pulling Together In Becker County **Cooperative Weed Management Area Plan** **2006 - 2014**

Presented by: Marsha J. Watland

Becker County Agriculture Inspector/Shoreland Specialist Technician

Becker Soil & Water Conservation District

8/2/2013 WRP Callaway Township



Grants for CWMA

- *Pulling Together Initiative Grant*
 - National Fish & Wildlife Foundation
 1. May 2007 to September 31, 2008 for \$45,000.00
 2. October 1, 2008 to September 31, 2010 for \$75,000.00

- *Cooperative Weed Management Area Grant*
 - Minnesota Board of Water & Soil Resources
 1. May 2008 to January 15, 2010 for \$24,000.00
 2. January 1, 2010 to December 31, 2011 for 15,000.00
 3. March 31, 2012 to October 1, 2012 for \$20,000.00
 4. 2013 no money available
 5. 2014 to December 31, 2016 Received a \$15,000.00

Total: \$194,000.00

Management Practices

2014 Cooperative Weed Management Area

Partnership/Steering Committee



Peter Mead
Marsha Watland



Anthony Cortilet



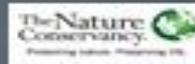
Jona Jacobson



Joe Stegmaier
Dana Hanson



Martin Wiley



Travis Issindorf



Terry Stiegel



Ed Muscielewicz



Brian Torgusson
Kent Wolf
Mike Lither



Tera Guetter



Louanne Brooks



Lowell Deede
Stacy Salvevold



Scott Ohnoutka
Katie Conklin



Dawn Kier



Polly Olson



Howard Kluender
Gary Thompson



Kathy Stenger (Height of Land)
Ric Jasken (White Earth)

BWSR Grant: 2014 – 2016 \$15,000
Main goal recreation trails.

Develop Management Plan to Follow

Becker County Becker County

Cooperative Weed Management Area Plan Cooperative Weed Management Area Plan

September 2007 through December 2014

Approved & Managed By

Pulling Together In Becker County Partnership Committee

Prepared By: Marsha Watland BSWCD & Cathy Henry USFWS



2014 Becker Soil & Water Conservation District

809 8th St SE, Detroit Lakes, MN 56501, 218-846-7360

Minnesota 2009 New Noxious Weed Law

18.78 CONTROL OR ERADICATION OF NOXIOUS WEEDS.

Subdivision 1. Generally, A person owning land, a person occupying land, or a person responsible for the maintenance of public land shall control or eradicate all noxious weeds on the land at a time and in a manner ordered by an inspector or county-designated employee.

Minnesota Prohibited Noxious Weeds	
Eradicate List	Control List
Yellow Starthistle, <i>Centaurea solstitialis</i> L.	Purple Loosestrife, <i>Lythrum salicaria</i> (L.)
Oriental Bittersweet, <i>Celastrus orbiculatus</i> Thunb.	Leafy Spurge, <i>Euphorbia esula</i> (L.)
Grecian Foxglove, <i>Digitalis lanata</i> Ehrh.	Canada Thistle, <i>Cirsium arvense</i> (L.) Scop.
Japanese Hops, <i>Humulus japonicus</i> Siebold & Zucc.	Plumeless Thistle, <i>Cardus acanthoides</i> (L.)
Dalmation Toadflax, <i>Linaria dalmatica</i> (L.) Mill.	Wild Parsnip, <i>Pastinaca sativa</i> L.
Common Teasel, <i>Dispsacus fullonum</i> L.	Common Tansy, <i>Tanacetum vulgare</i> L.
Cut-leaved Teasel, <i>Dispsacus laciniatus</i> L.	Spotted Knapweed, <i>Centaurea stoebe</i> L. ssp. <i>micranthos</i> (Gugler) Hayek
Giant Hogweed, <i>Heraclium mantegazzianum</i> Sommier & LeVier	Narrowleaf Bittercress, <i>Cardamine impatiens</i> L.
Brown Knapweed, <i>Centaurea jacea</i> L.	
Meadow Knapweed, <i>Centaurea x moncktonii</i> E.E. Britton	
Black Swallow-wort, <i>Cynanchum louiseae</i> Kartesz & Gandhi	

Restricted Noxious Weeds
Common or European Buckthorn, <i>Rhamnus cathartica</i> (L.)
Glossy Buckthorn (all cultivars), <i>Frangula alnus</i> Mill.
Multiflora Rose, <i>Rosa multiflora</i> Thunb.
Common Reed-nonnative subspecies, <i>Phragmites australis</i> (Cav.) Trin. Ex Steud subsp. <i>Australis</i>
Garlic Mustard, <i>Alliaria petiolata</i> (M. Bieb.) Cavara & Grande

Specially Regulated Plants
Poison Ivy , <i>Toxicodendron radicans</i> (L.) Kuntze Must be eradicated for public safety along rights-of-ways, trails, public accesses, business properties open to public or on parts of lands where public access for business or commerce is granted.
Japanese Knotweed & Giant Knotweed , must label unavoidable to plant this species within 100 feet of a water body or its designated flood plain as defined by Minnesota Statute 103F.111, Subdivision 4.

Becker County Noxious Weeds
Absinthe Wormwood, <i>Artemisia absinthium</i>
Hoary Alyssum, <i>Berteroa incana</i>
Houndstongue, <i>Cynoglossom officinale</i> L.

Common Tansy Treatment

Mechanical: Mow or clip	Before goes to seed, flowers just turning yellow	
Herbicide Treatment: Apply when plant 6"-12" high Add 2,4-D to mix to see results of spraying sooner than 3 weeks	1 oz. Telar or Escort + Water conditioner + non-ionic surfactant	.5 oz Escort+.5 oz Telar + Water Conditioner + non-ionic surfactant
Cimarron Max	3.3 oz Opensight or Chapparral + Water Conditioner +surfactant	
	Part A= 1 oz/acre + Part B=4 pints/acre + water conditioner + surfactant	

Measurements for Small Areas or Spot Treatment

Spot Application: For herbicide ratio 1 oz/acre.

Example: Mix one gram of Metsulfuron (Escort XP) or Chlosulfuron (Telar XP) per gallon of water + suitable adjuvant + water conditioner.

Spray to the point of wetting the entire surface of target weeds, do not soak soil, approximately 35 gallons of solution per acre. ¼ teaspoon = 1 gram

Spot Application: Chapparral, Opensight ratio at 3 oz/acre. Mix 1 Tablespoon of Chapparral or Opensight per gallon of water + suitable adjuvant.

Spot Application: Perspective at 5 oz/acre. Mix 1 oz/5 gallons of water or 2 teaspoons/gallon of water.

Order of Mixing Herbicide: These steps improve herbicide uptake.

First: Mix herbicide in water (if granule or powders use warm water)

Second: Mix conditioner in mixture if using hard water otherwise use soft water.

Third: Last add surfactant

If you have any questions please call Marsha Watland, Becker County Agriculture Inspector at 218-846-7360 or stop in at Becker Soil & Water Conservation District, 809 8th St. SE, Detroit Lakes.

Handouts

Becker County Noxious & Invasive Weed Identification

Becker Soil & Water
Conservation District
809 8th St. SE
Detroit Lakes, MN 56501
218-846-7360

www.co.becker.mn.us/dept/soil_water

2014



Prepared by Becker County Agriculture Inspector
MARSHA WATLAND

COOPERATIVE WEED MANAGEMENT AREA
BOARD OF WATER AND SOIL RESOURCES

Noxious/Invasive Herbicide Plant List

FOLLOW DIRECTIONS ON LABEL FOR MIXING

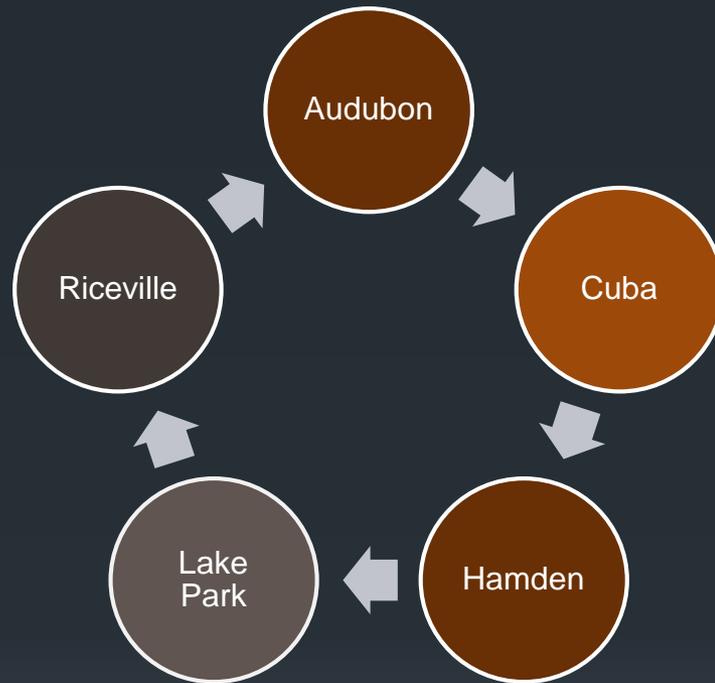
Call Becker County Agriculture Inspector if you have any questions, Marsha Watland at 218-846-7360 These herbicides were used in test sites 2007-2013.

Escort	Chapparral	Milestone	Opensight	Overdrive	Perspective	Telar	Transline
Bittercress	Hoary Alyssum	Hawkweed, Orange	Hoary Alyssum	Wild Parsnip	Wild Parsnip	Thistle, Musk	Hawkweed, Orange
Common Tansy	Common Tansy	Hawkweed, Yellow	Common Tansy	Sowthistle	Common Tansy	Common Tansy	Crown Vetch
Dalmation Toadflax	Crowmvech	Sowthistle	Crowmvech	Spotted Knapweed	Leafy Spurge	Teasel	Hawkweed, yellow
Halogeton	Giant Hogweed	Spotted Knapweed	Giant Hogweed	Teasel	Sowthistle	Thistle, Bull	Sowthistle
Houndstongue	Halogeton	Thistle, Bull	Halogeton	Thistle, Canada	Spotted Knapweed	Wild Garlic	Spotted Knapweed
Purple Loosestrife	Hawkweed, Orange	Thistle, Canada	Hawkweed, Orange	Thistle, Musk	Thistle, Bull	Wild Parsnip	Thistle, Bull
Teasel	Hawkweed, Yellow	Thistle, Musk	Hawkweed, Yellow	Wormwood, Absinthe	Thistle, Canada	Yellow Starthistle	Thistle, Canada
Thistle, Bull	Houndstongue	Thistle, Plumeless	Houndstongue	Yellow Starthistle	Thistle, Musk	Thistle, Musk	Thistle, Musk
Thistle, Canada	Purple Loosestrife	Wormwood	Purple Loosestrife		Wild Garlic		Yellow Starthistle
Thistle, Musk	Sowthistle	Yellow Starthistle	Sowthistle		Yellow Starthistle		
Thistle, Plumeless	Spotted Knapweed		Spotted Knapweed				
Wild Garlic	Teasel		Teasel				
Wild Parsnip	Thistle, Bull		Thistle, Bull				
Yellow Toadflax	Thistle, Canada		Thistle, Canada				
	Thistle, Musk		Thistle, Musk				
	Thistle, Plumeless		Thistle, Plumeless				
	Wild Garlic		Wild Garlic				
	Wild Parsnip		Wild Parsnip				
	Wormwood, Aisinth		Wormwood, Aisinth				
	Yellow Starthistle		Yellow Starthistle				

Do not confuse treating Common Tansy with Tansy Ragwort or Tansy Mustard

Inventory 5 Designated Townships

2007 & 2008



► Returned Inventories

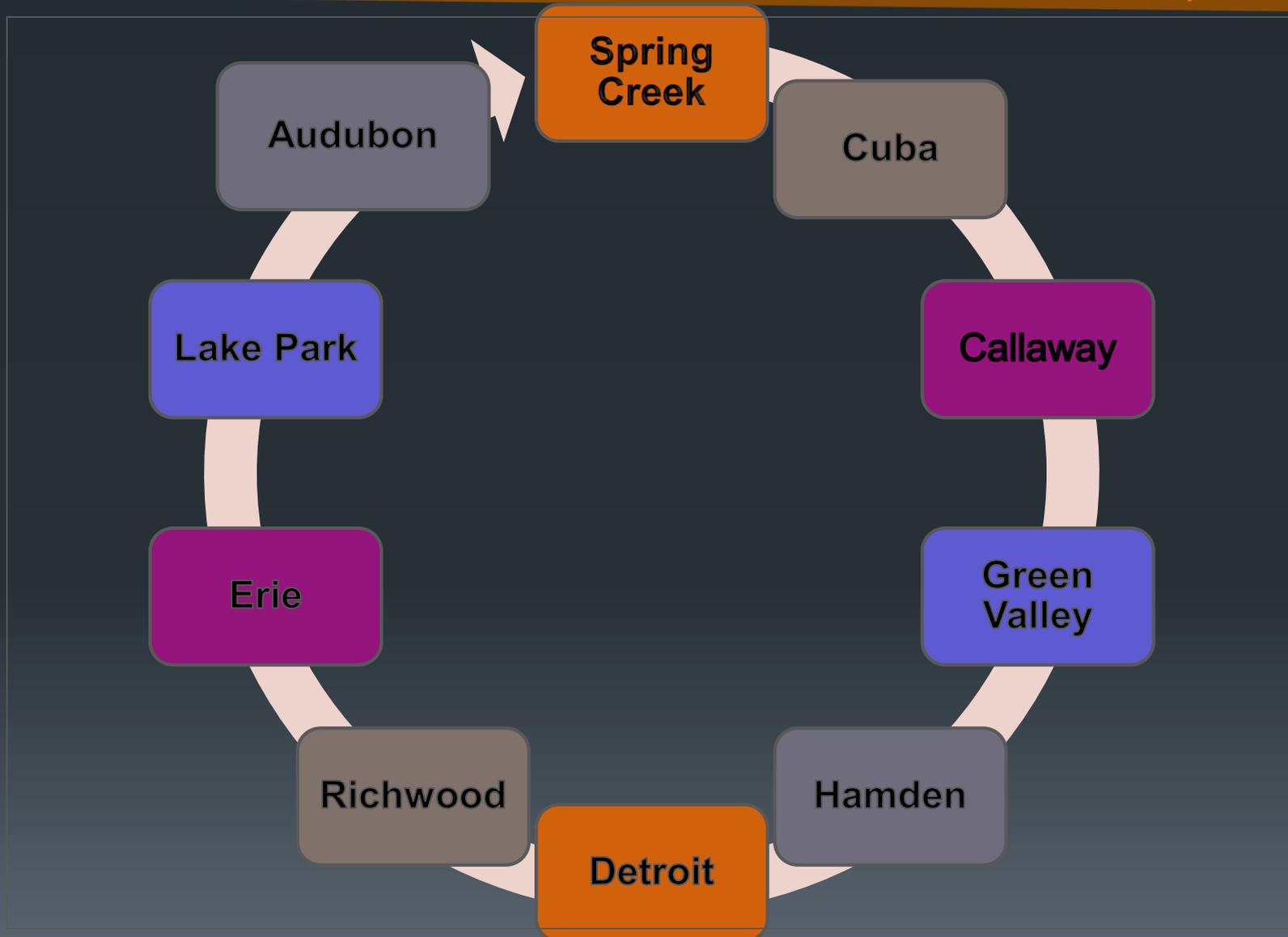
1. Atlanta
2. Burlington
3. Callaway
4. Carsonville
5. Cormorant
6. Detroit
7. Eagle View
8. Forest
9. Height of Land
10. Holmesville
11. Lake Eunice
12. Lake View
13. Osage
14. Riceville
15. Richwood
16. Savannah
17. Spring Creek
18. Sugar Bush
19. Walworth,
20. White Earth

Inventory 37 Townships, 2 Cities

2012

2014

Inventory 10 Designated Townships (Conservation Corps Intern)



2014 MN Noxious Weed List

Prohibited Noxious Weeds

Eradicate List	Control List
Yellow Starthistle	Purple Loosestrife
Oriental Bittersweet	Canada Thistle
Grecian Foxglove	Plumeless Thistle
Japanese Hops	✓ <u>Leafy Spurge</u>
Dalmation Toadflax	✓ <u>Wild Parsnip</u>
Common Teasel	✓ <u>Common Tansy</u>
Cut-Leaved Teasel	✓ <u>Spotted Knapweed</u>
Giant Hogweed	Narrowleaf Bittercress
Brown Knapweed	
Meadow Knapweed	
Black Swallow-wort	

Restricted Noxious Weeds

Common or European Buckthorn
Glossy Buckthorn (& all cultivars)
Multiflora Rose
✓ Common Reed (Non-native subspecies)
Garlic Mustard

Specially Regulated Plants

Poison Ivy
Japanese Knotweed
Giant Knotweed

Becker County Noxious Weeds

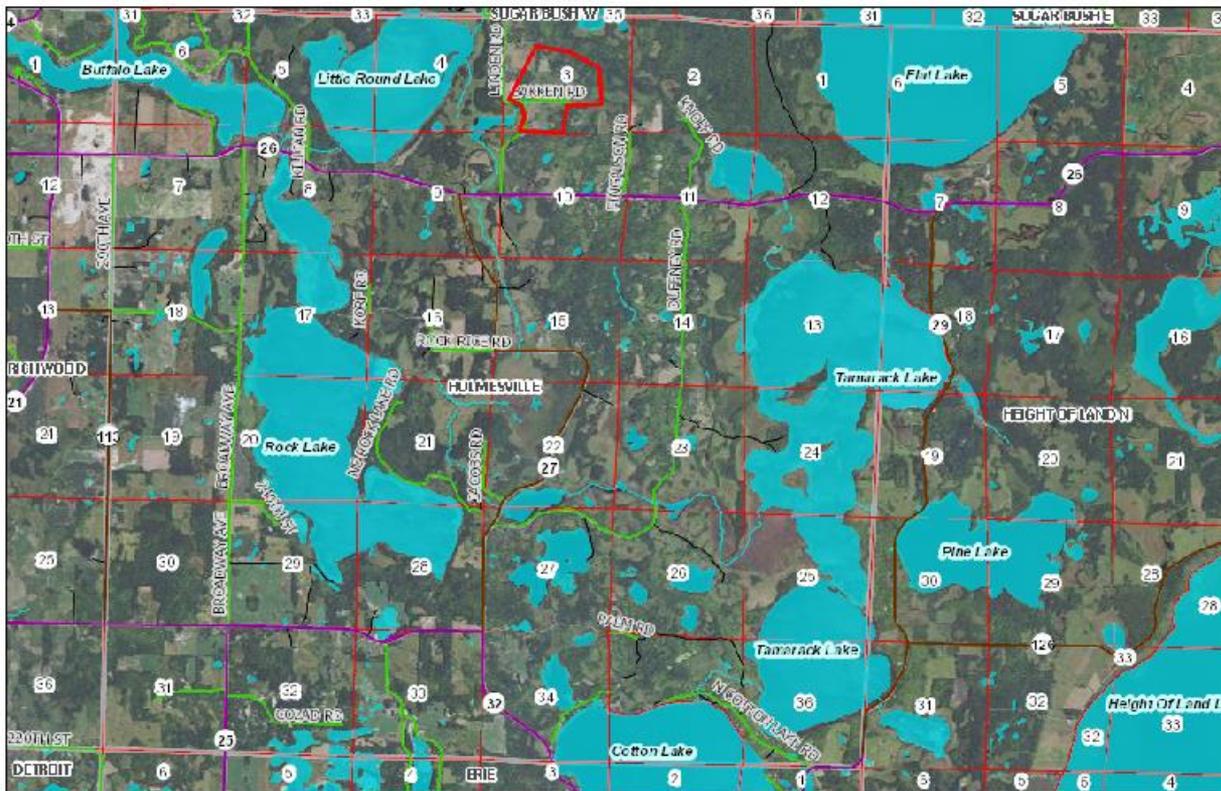
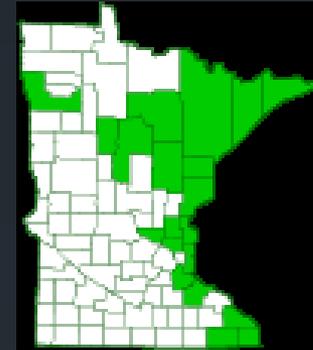
Absinthe Wormwood
Hoary Alyssum
✓ <u>Houndstongue</u>
✓ <u>Orange Hawkweed</u>
✓ <u>Yellow Hawkweed</u>

Develop Management Plan to Follow Method Of Treatment

- The PTI partners will be implementing an Integrated Pest Management (IPM) approach using biological, chemical, mechanical, and cultural control methods
- IPM treatments will be prioritized and coordinated through the collaborative efforts of the partnership/steering committee.
- Provide early detection and rapid response to manage and control the spread of existing and emerging invasive species infestations.

Orange & Yellow Hawkweed added to County Weed List

Page 31 & 32 of BC Weed ID Book



Orange Hawkweed
Holmesville Twp

Wednesday, Mar. 19, 2014 at 1:30 PM

These data are provided on an 'AS-IS' basis, without warranty of any type, expressed or implied. Including but not limited to any warranty as to their performance, merchantability, or fitness for any particular purpose.

Restricted Noxious Weed List

Common Reed, non-native subspecies

Phragmites australis (Cav.) Trin. Ex

Steud subsp. *Australis*



Phragmites: Non-native
April 23, 2014
Partners:
MNDOT, USFWS, CAI



Houndstongue Inventory & Seed Head Collection

8/5/2011 Houndstongue Rossette



photo by Marsha Watland BSWCD

**8/5/2011 Houndstongue
Silver Leaf Township**

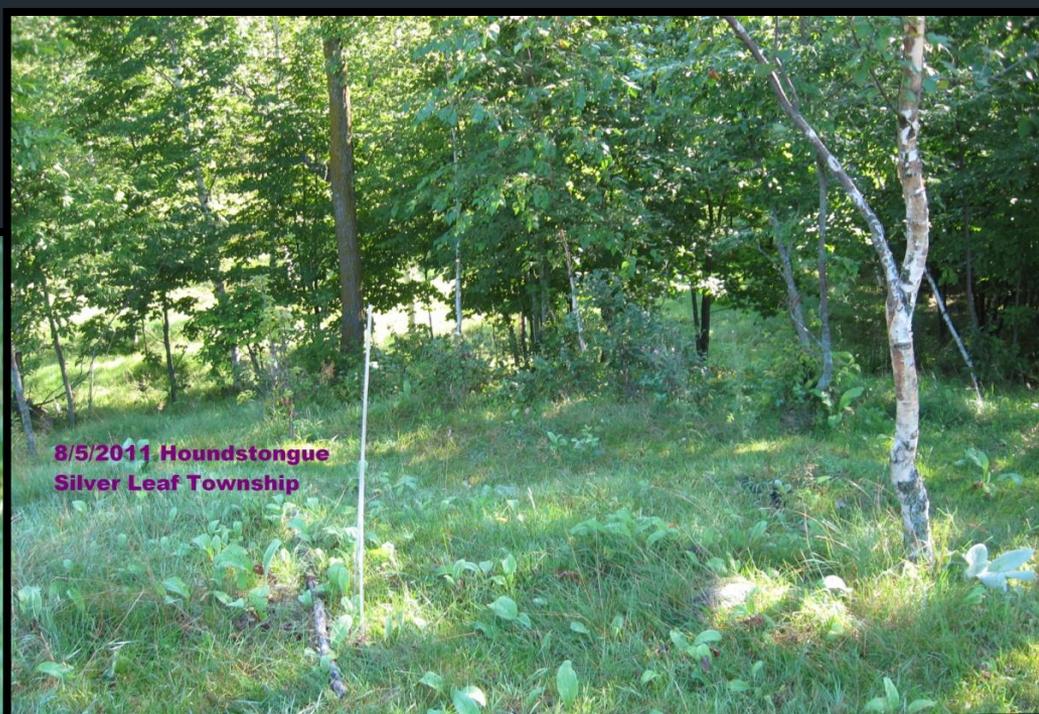


photo by Marsha Watland BSWCD

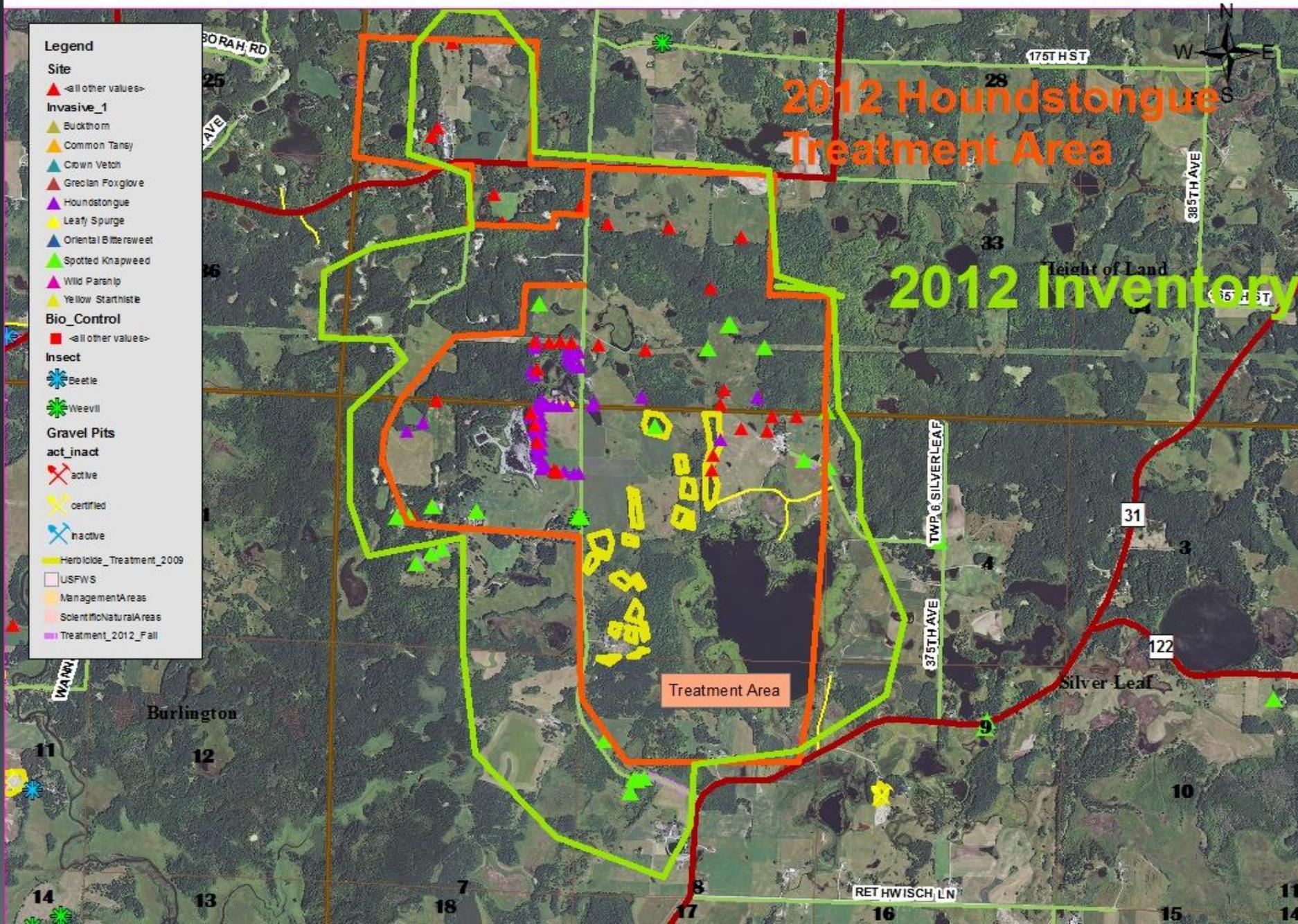
**Houndstongue & Spotted Knapweed
9/28/2011**



photo by Marsha Watland BSWCD



2012 Houndstongue Fall Inventory & Treatment



2014 Becker County Invasive Plant Management Common Tansy Management Plan

1. 2011 Treatment Area:

- A. Round Lake (S) Twp., Sect 2, 3, 11, 10, 14 & 15 recreation trail test site.
- B. Becker Co. Highway 37 connecting to & 58 and heading east.
- C. State Hwy 10, Tansy north side of road.
- D. Round Lake (S) Twp. Gravel Pits, section 35
- E. Numerous Land Owners

2. 2012 Treatment Area:

- A. Becker County Highway 37 & 58 to 44
- B. MNDOT Highway 87
- C. Inventory trails in northeast county
- D. Inventory trails in southwest county
- E. Numerous Land Owners

3. 2013 Treatment Area:

- A. Becker County Highway 37 & 58 to 44
- B. MNDOT Highway 87
- C. Treatment of County Recreation Trails in Round Lake and Forest Township approximately 61 miles
- D. Treatment of DNR Management area in Two Inlets Township.

4. 2014 Treatment Area:

- A. Recreation Trail: private land treated by licensed applicator
- B. Inventory of following townships: *Spring Creek, Callaway, Spruce Grove, Runeburg, Green Valley, Pine Point, Round Lake, Two Inlets, Osage, Richwood and Detroit, Erie, Cuba, and Lake Park.*
- C. Letters will be sent out spring and fall to adjacent landowners on Co Hwy 37, 58 & 44 and State Hwy 87 and Co Hwy 43 & 47.



E. Treatment Plans

Host sites for common tansy & spotted knapweed: *White Earth, Maple Grove, Round Lake (north & south), Forest, Two Inlets, Pine Point, Shell Lake, Spruce Grove.*

- A. Common tansy must be treated yearly
 - B. Landowner will need to meet up with road treatment of tansy and other noxious weeds.
 - C. Tansy burns extremely hot due to the debris. Burn in spring before June 1st. A burn plan should be set up. Burn identified large areas of tansy to remove previous season dead plant material. Let new growth develop and germinated seed reach a height of 8-12" to treat with herbicide.
 - D. Tansy must be clipped before or when flower turns yellow so no viable seed develops. (This will not stop the tansy plant from spreading in its' spot, but prevent movement down trail, road or wildlife path and may need several mowing's throughout growing season).
 - E. All roadways must be treated. Landowners need to be contacted if tansy or other noxious weeds are located on their property to start a management plan.
 - F. Recreation Trails: Treat tansy and other noxious weeds on side of trail with herbicide in spring as new growth develops at a height of 10-14" to reduce treatment costs. Must be clipped before bloom to prevent movement of tansy and other noxious weed seeds from moving down trail. Native grasses can be planted along roadside to compete with tansy after area has been treated. Spot treatment and clipping are effective!
- F. Tansy Areas: Rest of Becker County will control tansy.
- a. Spring treatment with herbicide.
 - b. Mow so tansy does not flower.
 - c. Must be clipped or treated with herbicide before flowers turn brown with viable seed.
 - d. All fence lines must be treated: mow, till or herbicide may not be allowed to flower. Call Becker County Agriculture Inspector with any questions: 218-826-7360

Common Tansy Management Practices

Common Tansy - *Tanacetum vulgare* Prohibited Noxious Weed—Control List

Characteristics

1. Perennial— blooms in July –October.
2. Reproduce from seed and root fragments.
3. Estimated 2,553 filled achenes/plant
4. May remain in flower heads on dead stems for up to 3 years, no information on viability after 3 years
5. Suggested that common tansy seed is generally viable for just one season
6. Seed is not viable at the yellow flower stage
7. Seeds spread by snow drifting, animals, water, humans & equipment.
8. Mature roots are very difficult to kill with herbicide.
9. Height up to 6 feet.
10. Is a toxic plant— the toxic properties are cumulative, use gloves when handling plant.
11. Does not tolerate tillage.
12. Mowing reduces seed production.
13. Treat with herbicide at 8-18” height. Must be done yearly till tansy is gone. Herbicide has only a 30 day residual.

Impacts – Common tansy is highly invasive and can severely reduce pasture capacity and desirable forage, degrades wildlife habitat, hinders reforestation and landscape restoration efforts, and in some instances can be toxic to humans and livestock.

Herbicide Control:

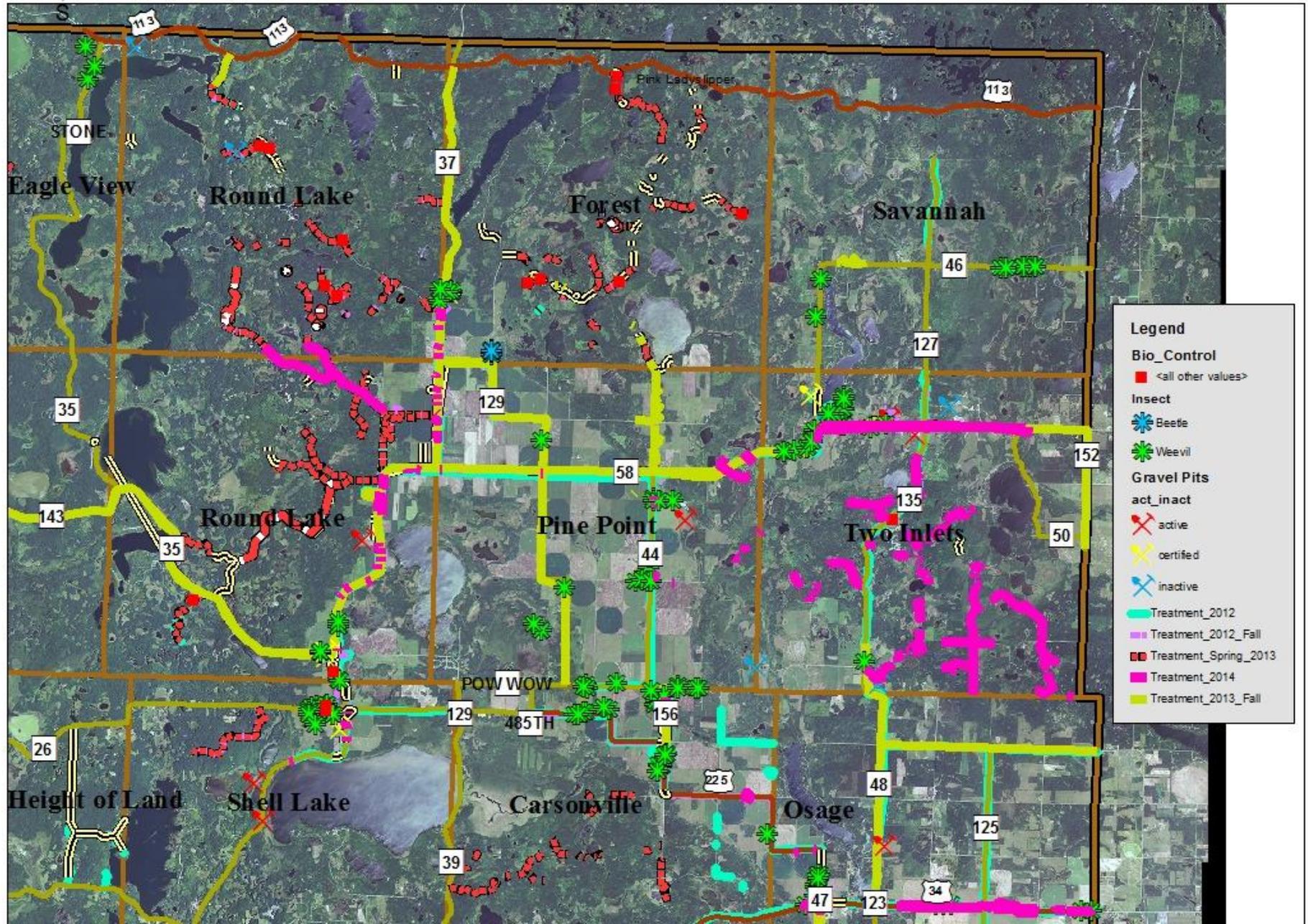
- **Opensight or Chapparral** – 3oz/acre + Surfactant + soft water or water conditioner.
- **Escort or Telar** – 1oz/acre + Surfactant + soft water or water conditioner.
- **2,4-D + Escort or Telar or Opensight or Chapparral** + soft water or water conditioner.

Follow Directions, More Is Not Better





Northeast Becker County Road and Recreation Trail Treatment



Biological Control





BECKER COUNTY
Pulling Together Initiative/CWMA
Contract Agreement
 Becker Soil & Water Conservation District
 218-846-7360



Name:	Phone:	Date:
Address:	Township:	Section:

The landowner's and land occupier's signature indicates their agreement to:

- Participate in the Biological Control Program for Leafy Spurge and Spotted Knapweed.
- Grants the Agriculture Inspector access to the parcel where the invasive weed control will be located for:
 - Mapping
 - Use of data
 - Monitor site
 - Placement of insects
 - Photographs



3. Treatment: Spotted Knapweed: Placement Date _____

- Keep good records and photographs to show the changes over time.
- Field release sites should be fairly large infestations (2 or more acres) contiguous to other infestations so that the weevils can spread.
- Drier, open, south or west facing sites with somewhat sandy soil are preferred, that will not be flooded. The spotted knapweed plants should be fairly dense.
- The site should not be: 1) disturbed for at least 5 years, 2) sprayed with herbicide or insecticide, or 3) heavily grazed from July-November.
- Equipment entering and leaving site should be clean of spotted knapweed seed.

4. Treatment: Leafy Spurge: _____

- Keep good records and photographs to show the changes over time.
- Field release sites should be fairly large infestations (2 or more acres) contiguous to other infestations so that the weevils can spread.
- Place beetles where ants are not observed. Ants harvest beetles.
- The site should not be: 1) disturbed for 5 years, 2) Sprayed with herbicide or insecticide
- Equipment entering and leaving site should be clean of leafy spurge seed and plant parts



6. Landowners Cost: None Grant Share: _____ @ \$165/container weevils = _____

7. Continue to monitor and control weed infestation. Parcel # _____

 Name (owner signature) Date

 Co. Agriculture Inspector Date

**Biological
 Control
 Agreement**

7/30/2009
Two Inlets Wattenhofer Site



Spotted Knapweed
8/6/2008
Detroit Lakes Airport



8/21/2012
CRP Spotted Knapweed Control



Invasive Species Traveling Workshop
Spotted Knapweed Root Weevil



by Marsha Watland BSWCD

photo by Marsha Watland

**9/18/2013
Spotted Knapweed
Biocontrol**



**7/30/2009
CRP Spotted Knapweed Weevil Placement**



Spotted Knapweed Site

**7/30/2009
CRP Spotted Knapweed**



**Spotted Knapweed
Pine Point TWP CRP
8/7/2008**



Pine Point Biocontrol Site 100 Root Weevils & 300 Seedhead Weevils/Deposit

**8/20/2013
Pine Point Twp**

**Pine Point Twp
8 Biocontrol Sites**



Spotted Knapweed Treatment Native Plants Improves Habitat for Native Pollinators



Spotted Knapweed Biological Control 2006 - 2014

Treatment		Placement				Harvested	
Year	Sites	Seedhead Weevils	Root Weevils	Acres Treated	Purchase Price	Seedhead Weevils	Root Weevils
2006	4	1,000	50		MDA		
2007	1	400	50		MDA		
2008	39	7,800	3,000		\$5,040.00		
2009	31	6,200	3,100	1624 A	\$4,500.00		
2010	33	6,000	3,000	1,807 A	\$4,500.00	193	
2011	17	1,478	40	191 A		2,298	142
2012	46	4,409	225	1348 A		4,640	536
2013	1	0	20	1:00 AM		0	20
2014	MDA		85				85

2006-2014 Leafy Spurge Biological Control

Year	Sites Treated	Placement Flea Beetle	Harvested Flea Beetle	Acres Treated
2006	25	159,000	Ottertail Co	
2007	14	109,000	Ottertail Co	
2008	20	88,500	120,000	
2009	36	106,000	132,000	748 Acres
2010	37	83,000	83,000	681 Acres
2011	17	29,950	37,250	62 Acres
2012	40	70,100	115,700	1,633 Acres
2013	23	50,300	84,500	408 Acres
2014	5	6,700	6,700	20 Acres

Located on Becker County SWCD Web Page

- Updated regularly
- Gravel Pits can be added throughout the year.
- Townships updated on certified gravel pits



9/18/2014
Gravel Pit
Spotted Knapweed Treatment



Becker Soil & Water Conservation District
809 8th Street SE
Detroit Lakes, MN 56501
218-846-7360



2014 Certified Gravel Pits

Implementation And Guidelines To Develop A List Of Gravel Pits Approved For Noxious & Invasive Weed Control.

The goal of the Gravel Pit Certification Program is to buy gravel with reduced seed bank, to reduce maintenance costs and spread of both invasive and noxious weeds throughout the county.

1. Becker County will purchase material from approved pits only, including new pits that become participants in this program.
2. Participation is voluntary for new and existing pits.
3. Participation requires a commitment to weed control for seven years following sign-up.
4. This time period is based on an estimate of the time required to substantially diminish the viability of the seed bank in weed infested property.
5. Inspections will be done at least twice each growing season for all participating pits to qualify for or remain on the approved pit list.

Prohibited Noxious Weeds

Eradicate List:

- | | |
|-------------------------|------------------------|
| 1. Yellow Starthistle | 7. Grecian Foxglove |
| 2. Oriental Bittersweet | 8. Giant Hogweed |
| 3. Japanese Hops | 9. Brown Knapweed |
| 4. Dalmation Toadflax | 10. Meadow Knapweed |
| 5. Common Teasel | 11. Black Swallow-wort |
| 6. Cut-Leaved Teasel | |

Control List

- | | |
|-----------------------|---------------------------|
| 1. Leafy Spurge | 5. Wild Parsnip |
| 2. Canada Thistle | 6. Common Tansy |
| 3. Plumeless Thistle | 7. Spotted Knapweed |
| 4. Purple Loosestrife | 8. Narrowleaf Bittercress |

Restricted Noxious Weeds

- | | |
|---------------------------------|-------------------|
| 1. Common or European Buckthorn | 4. Common Reed |
| 2. Glossy Buckthorn | 5. Garlic Mustard |
| 3. Multiflora Rose | |

Specialty Regulated Plants

- | | |
|----------------------|-------------------|
| 1. Poison Ivy | 3. Giant Knotweed |
| 2. Japanese Knotweed | |

County Noxious Weeds

- | | |
|----------------------|-----------------------------|
| 1. Absinthe Wormwood | 3. Houndstongue |
| 2. Hoary Alyssum | 4. Yellow & Orange Hawkweed |

- Aggregate Industries
Alajoki Gravel
Pit: 52, 52E, 44, 43, 44, 88 & 97
Anderson Gravel Pit, Richwood
Boit Gravel Pit
Becker County Gravel Pits
: 59 Pit
: Ford Pit
: Toad lake Pit
: Bad Medicine Pit
: Karkinen Pit
: Scholz Pit
Central Specialties Inc.
: Lake View Pit
: Cormorant Pit
: L. Anderson Pit
: Toad Lake Pit
Dave Nelson Gravel Pit
Hickel Pit
Hough Inc.
: Lake Eunice
Harlow Krogen Pit
Lake View Township Pit
Mark Sand & Gravel Pits
: Antilla
: Hallikanen
: Wetzel
: Candor
: Two Inlets
B. Maurer Pit
Olson, Orvis
Rock Ridge Resources, Lake View
Rollag Hills Aggregate
Joe Stenger Pit
Tim Stenger Pit
Strata Pit
: Detroit Twp Pit
: Lake View/Detroit Twp Pit
: Parke Twp Pit
: Cormorant Twp Pit

5/24/2013 Gravel Pit Inspection

Noxious Weed Management is Hard on Vehicles



**8/25/2009
Gravel Pit
Treatment
Green Valley Twp**



**9/2/2011
Snowmobile Trail
Gravel Pit Site Cormorant Twp**



**5/20/2011 Maurer Pit
Spotted Knapweed Treatment Site
Milestone**



**2014 Spotted Knapweed and
Common Tansy Treatment**



11/3/2008 Nelson Seed Treatment Site
Treated for Spotted Knapweed 9/12/08 with Overdrive



Becker Co. Ag. Inspector

Native Planting Gravel Pit Area (EQIP Program)

9/2/2011
Nelson Native Planting

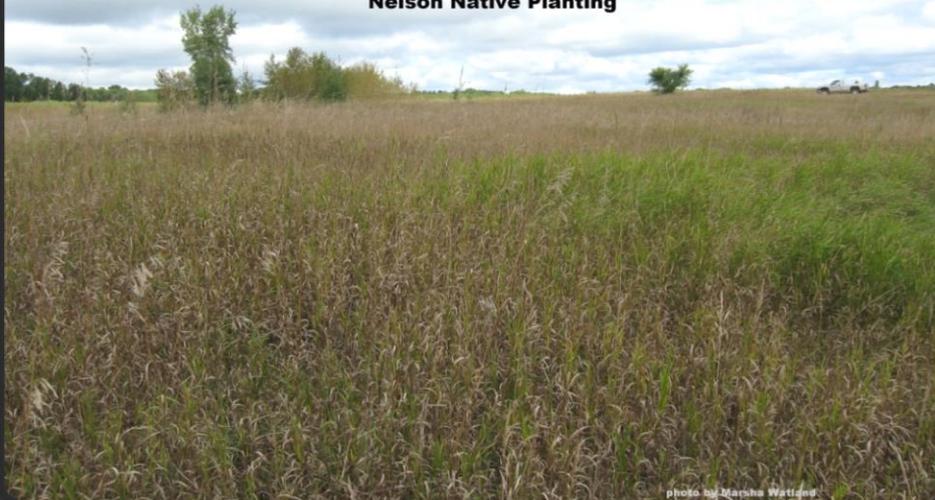


photo by Marsha Watford

8/15/2012
Nelson Native Planting



11/20/2009



3/30/2010
Spotted Knapweed CWMA Site Burlington Twp



5/17/2011
Spotted Knapweed Site
Native Grass Planting



Spotted Knapweed Treatment With Native Planting Environmental Quality Incentives Program (EQIP)

7/11/2012
Spotted Knapweed EQIP



10/2/2014



Communication & Education





8/18/2011
Invasive Species Traveling
Workshop
Presenter Robert Koch (MDA)

photo by Marsha Watland BSWCD



8/18/2011
DNR Common Tansy
Treatment Site

Photo by Marsha Watland

MISAC Invasive Species Traveling Workshop



Houndstongue



8/18/2011
Spotted Knapweed Collection



Photo by Marsha Watland



8/18/2011 1:16:50 PM
Wild Parsnip at Jacobson Site



8/18/2011 1:21
Wild Parsnip Test Site
Chapparral



9/4/2009 12:05
Jacobson Hayfield
Wild Parsnip Treatment Site



Tours

Successes

1. CWMA Partners 2007
2. As partners change, having a management plan in place helps with transition.
3. Biological Insectary Sites for Spotted Knapweed and Leaf Spurge 2006.
4. Gravel Pit Certification Program 2009
5. Houndstongue Management Program 2009 (*Landowner, CAI, MNDNR*)
6. Recreation Trail Invasive Plant Management 2011
(*Becker Co Natural Resources, Woods & Wheels ATV, CAI*)
7. Common Tansy Roadside Management Fall 2011
(*Becker Co. Hwy, CAI, Adjacent Landowners*)
8. Phragmites Management Program 2014 (*USFWS, MNDOT, CAI*)
9. Development of Road Management Program
(*What is happening between CAI's & MNDOT*)
10. Development of test sites in Becker County with Dow AgroScience & DuPont (Houndstongue, Spotted Knapweed, Common Tansy, Plumeless Thistle, Wild Parsnip)
11. GIS Mapping: Can pull up inventoried area any time to make decisions.

Pit Falls

Tanacetum vulgare
Common Tansy
5,000 seeds \$4.99



1. Weather- late springs and deep frost
2. As partners change administration in their organization, there is a time frame where education/training need to occur and this can affect management timing for specific invasive plants.
3. Working with todays continuing spread, specifically:
 - a. Weather
 - b. Unknowing gardeners
 - c. Seed: unclean seed
 - d. Recreation
 - e. Wildlife
 - f. Motor Vehicles

