

# RAPID RESPONSE & CONTROL OF POLICEMAN'S HELMET

Town of Richmond  
Shawano County, WI

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Upper Midwest Invasive Species Conference  
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# OUTLINE

- ◉ Identification
- ◉ Biology
- ◉ Ecological Impacts
- ◉ Distribution / Habitat
- ◉ Response Protocol
- ◉ Treatment Evaluation
- ◉ Lessons Learned



# POLICEMAN'S HELMET

- ◉ *Impatiens glandulifera*
- ◉ First known WI occurrence
- ◉ Himalayan native



# DESCRIPTION

- Annual
- Grows 3 - 7 feet tall
- Stout plant



# DESCRIPTION

- ◉ Hollow upright stems with red/purple tinge
- ◉ Prominent Nodes
- ◉ Large lanceolate leaf with serrated edges



# DESCRIPTION

- ◉ Irregular 5-part flower
- ◉ Resembles English Policeman Helmet
- ◉ Flower can range from white to pink to purple



Purple flowers



Pink flowers

08/11/2012

# BIOLOGY

- ⦿ Flowers mid-June to October
- ⦿ Reproduces by seed
  - Capsules “explode” with slightest touch



# BIOLOGY

- Seeds can remain viable for 2 growing seasons
- Float and can germinate elsewhere
- Evidence of deer browse on and transport of species





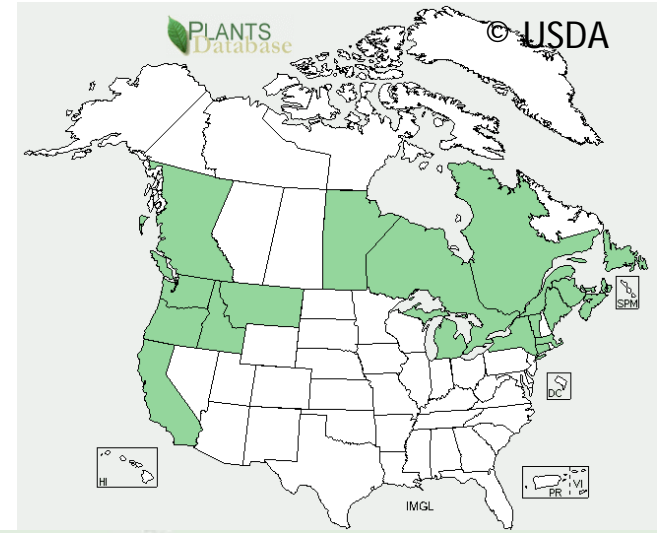
# IMPACTS

- ◉ Classified as “highly invasive” in England and several US states
- ◉ Displaces beneficial native species
- ◉ Displaces lawns and other landscaping plants
- ◉ Contributes to both flooding & erosion



# DISTRIBUTION

- Found throughout northern US and Canada
- Found in similar climate (and colder) to WI
- Pioneer population in Shawano County
  - Introduced by seeds from United Kingdom



# HABITAT

- ◉ Riparian areas
- ◉ Gardens
- ◉ Moist/wet woodlands
- ◉ Tolerant of many soil types
- ◉ Thrives in both partial shade & sun



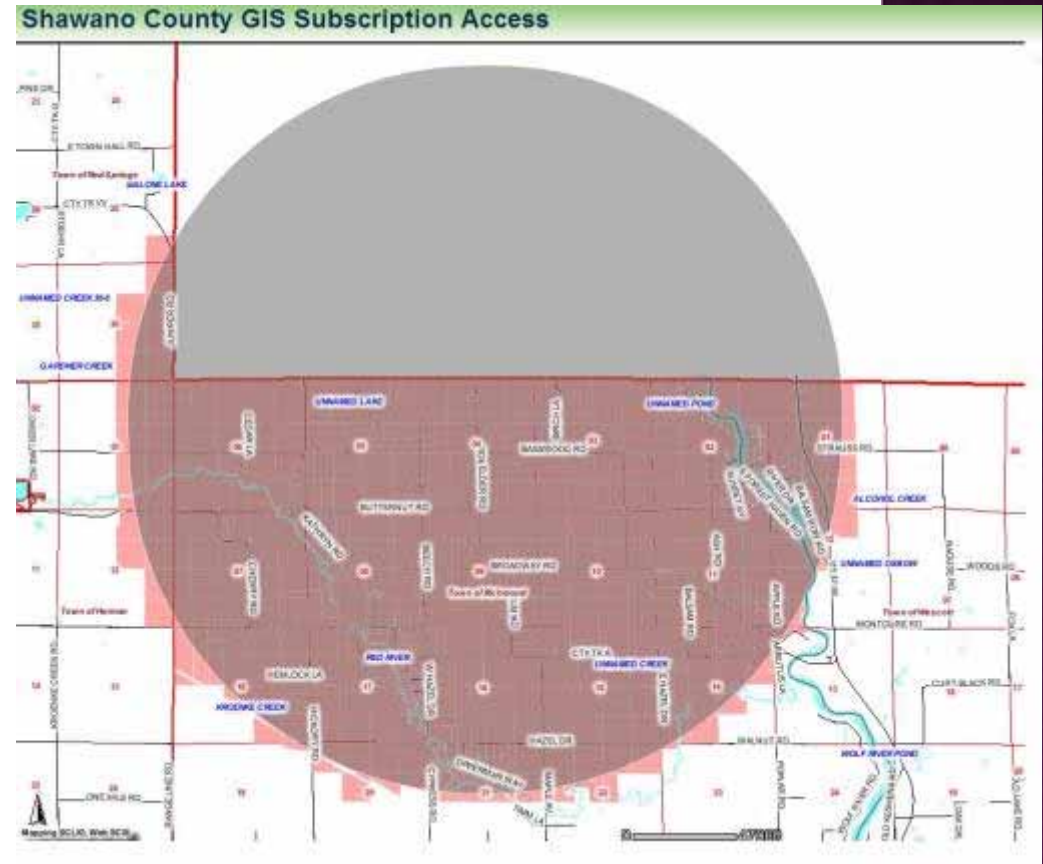
# RESPONSE PROTOCOL

- Shawano County received U.S. Forest Service Suppression Grant for control
- PH colony on 20 acre parcel
- Three mile radius survey area established

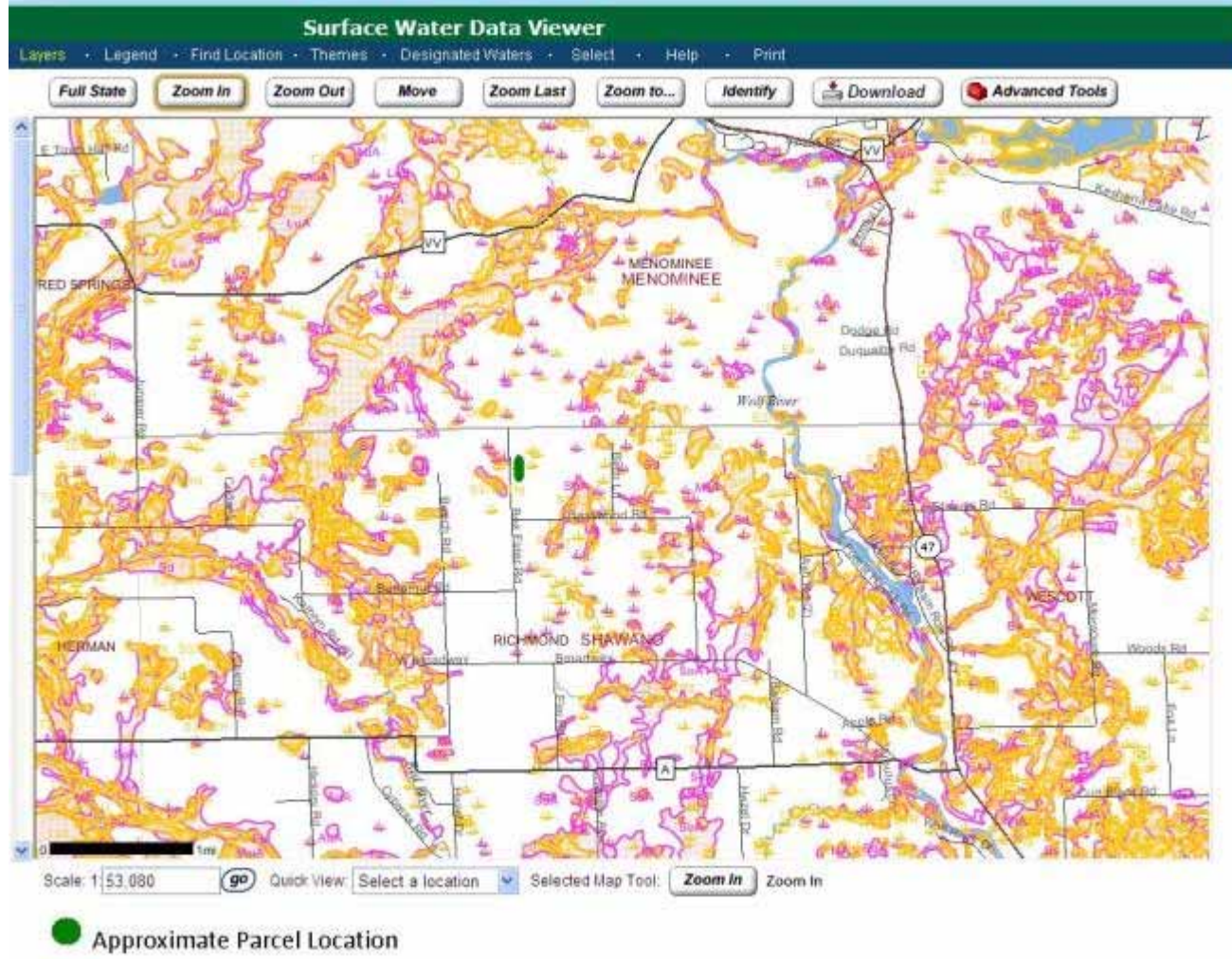


# RESPONSE PROTOCOL

- Survey roadsides in 2011 & 2012
  - County staff
  - Town of Richmond mowing operations
- Surveyed river corridors where possible
  - Managed Forest Law properties
  - Land Trust properties
  - Land owner permission



# RESPONSE PROTOCOL



# RESPONSE PROTOCOL

- ◉ Direct mailing to ~500 property owners
- ◉ Town board presentations
- ◉ Offered plant ID services
  - Electronic photos
  - Plant samples to office
  - On-site visits



# RESPONSE PROTOCOL

- ◉ Menominee Tribe of Indians surveyed tribal properties
  - Game trails GPS-ed
- ◉ Entire parent parcel survey w/ 3 yard transect survey





# TREATMENT EFFECTIVENESS



- Mechanical methods most efficient
  - Hand pulling
  - Mowing
  - Burning
- Chemical treatments
  - Proved ineffective

# OTHER LESSONS LEARNED

- ⦿ Great method to map other invasive species
- ⦿ Aggressive 'hands on' approach resulted in high public participation



# OTHER LESSONS LEARNED

- ⦿ Second treatment year anticipated
  - Small plants missed
  - Dense growth
  - Woodlot not as heavily infested in '12
  - Small population left



# OTHER LESSONS LEARNED

- ◉ Which other invasive species will invade?
  - Dame's rocket (*Hesperis matronalis*)
  - Burdock (*Arctium minus*)
  - Garlic mustard (*Alliaria petiolata*)
  - Buckthorns (*Rhamnus sp.*)
  - Bush honeysuckles (*Lonicera sp.*)



# ACKNOWLEDGEMENTS

- ◉ U.S. Forest Service
- ◉ Wisconsin DNR
- ◉ Menominee Tribe of Indians of Wisconsin
- ◉ Town of Richmond
- ◉ Northeast Wisconsin Land Trust
- ◉ Rawhide Boys Ranch
- ◉ Property owners



# QUESTIONS

