NOXIOUS WEEDS
INVASIVE WEEDS

CLYDE MASON
GREENFIELD DISTRICT

WEEDS

• NOXIOUS WEED CAN NOT GROW
• NOXIOUS WEEDS CAN NOT HAVE IN SEED
• INVASIVE PLANTS
  – NO IND CODE

INVASIVE PLANTS

• Harmful, non-native plants have been introduced to North American landscapes.
• Some brought in intentionally-(landscape), others introduced accidentally.

What’s the Big Deal…
Why is this Important?

• As native plants are displaced by invasives,
• Native populations decline, and
• So does habitat diversity that so many forms of wildlife depend upon.
• Invasives displaced farm crops

What are “invasive plants”?
Plants which grow aggressively and displace other species.
CANADA THISTLE

- BEST 16 OZ TO 32 OZ TORDON / ACRE
- 2 TO 3 GT GARLON PER ACRE
- 1/2 OZ TELAR PER ACRE
- PT TRANSLINE PER ACRE
- ALL OK TO SPRAY ON GRASS

2 QT SPRAYED IN SEPT NOTE WILD CARROT
JOHNSON GRASS

- OUTRIDER
  - 1 OZ PER 100 GALLONS/acre
  - 1 OZ PER 25 GALLON/acre
  - NO BROWN OUT- GOOD ON ROOTS

- FUSION EVERY 2 OR 3 SEASONS
  - BURN DOWN- NOT GOOD ON ROOTS
Multiflora Rose

- Perennial Shrub
- Suckers/Seeds
- Tip Sprouts
- Escort
- Garlon
- Arsenal/Stalker
- Tordon
- Follow up
- Foliar

MULTIFLORA ROSE

- 2 QT GARLON + 2 OZ ESCORT
- TORDON

Purple Loosestrife

Lythrum salicaria
Purple Loosestrife

- Perennial Herb
- 30-50 Stems per root
- Likes Wetlands
- Out competes natives
- Reduce Waterfowl habitat
- 2-3 million seeds/plant
- Stem reproduction 1/yr
- Rodeo
- Garlon 3 A
- Arsenal—NEW HABITAT
- Foliar

PURPLE LOOSESTRIFE

- RODEO
- GARLON 3A
- HABITAT

Garlon* 3A Registration

- December 3, 2002 DAS received the Garlon* 3A herbicide Section 3 label registration for aquatic uses.
- So Now What?
- This has set into motion a number of registration activities at the state level.

Garlon* 3A Registration

Kudzu
Kudzu!
- Climbing Simi-Woody
- Flower late summer
- Kills/Degrades Trees
- 60ft/season or 1 ft/day
- Tap Root 7” by 6’ deep
- Escort/Garlon
- Transline
- Accord Concentrate
- Foliar

KUDZU
- 21 TO 32 OZ TRANSLIN PER 100 GAL
- DNR MEETING ON MARCH 23
- 19 CO IN THE SOUTH

PHRAGMITES
- AFTER SEEDING- RODEO
- HABITAT
Phragmites
- Arsenol – HABITAT 2 Qt+
  1 Qt MSO/Acre
- Rodeo 1-1.5 % + 1% Invade 90
  During late summer to bloom

HABITAT

Basal Bark Treatments
- Coverage of the entire stem circumference is key to success
- Must treat higher up on larger diameter stems
- On root suckering species, make sure collar area is covered, treat root flares, or exposed roots
- Do not treat when bark is wet

Autumn Olive
- Shrub or Small Tree
- Berry Attracts birds & Wildlife
- Pasture & Understory of Forest
- Basal-Garlon 4/Stalker/Tordon
- Cut Surface-Garlon 4/Stalker
- Foliar-Garlon3A/Krenite/Arsenol/Tordon

Autumn Olive

Eleagnus umbellata
AUTUMN-OLIVE

Bush Honeysuckles
Deciduous Shrubs
- 6-15 feet
- Egg shaped leaves
- Dense shading
- Stout Shrub Growth
- Accord Concentrate
- Tordon K
- Arsenal/Stocker

Asian Bush Honeysuckles
(Lonicera sp.)

Japanese Honeysuckle

Arsenal/Stalker
Garlon 4 2%
Accord Con 2%
Escort XP

Tree of Heaven

- Ailanthus
- Chinese Sumac
- Female Tree
- Fence/Roads
- Toxic to plants
- Prolific seed
- Suckers
- Garlon 4/Stalker
- Garlon3A/Arsenal
- Accord Concentrate
- Escort/Tordon
- Follow up
Tree of Heaven (Ailanthus)

Japanese Knotweed
- Shrublike herbaceous perennial
- Dense Thicket shade native vegetation
- With stand floods and drought
- Red/Brown Cane Like Stems
- Rhizomes
- Garlon/Tordon
- Arsenal/Stalker
- Accord Concentrate
- Cut Stubble
- Foliar-Oct-Nov To Avoid non-target Damage

TREE-OF-HEAVEN

JAPANESE KNOTWEED
- GARLON
- ROUNDUP
- TORDON
Garlic Mustard

- Cool Season Biennial Herb
- Rosettes
- Can be mistaken for several White flowering Native plants
- Partial Shade & Flood Plains
- Burning releases Seeds
- Accord Conc 1%
- Garlon 3A
- Plateau
- Foliar-April-June

GARLIC MUSTARD

Garlic mustard
(Alliaria petiolata)

GARLIC MUSTARD

OTHER INVASIVES

- REED CANARY GRASS
- BUSH HONERSUCKLE
- MUSK THISTLE
- TEASEL
- CROWNVETCH
- TREFOIL
- FOXTAIL BARLEY

MERALD ASH BORER

HERED INDIANA ASH TARS

SEEDS OF INFECTION

SILK SPIDER LACEWING

REAPED ASH BORES

 waving leafs of this and other trees. left to right: 757, 207, 050C, 686 & D989.
Dormant Stem Applications

• Expand your spray season- NOV to April
• Keep employees year round
• No brown out low profile
• Easy Access in crop fields
• Use on small diameter brush 3” or smaller
• Use for chemical side trim

Dormant Stem - Kentucky DOT - Applied March 22, 2002  Photo taken July 2, 2002
Garlon 4 @ 2 gallons + 2 gallons of COC per 100 gallons

Dormant Stem - Kentucky DOT - Applied March 22, 2002  Photo taken July 2, 2002
Garlon 4 @ 2 gallons + 2 gallons of OIL per 100 gallons
What Has Driven This Concept?
- We are all aware of the pressures that we face in today’s society
  - Pesticide fears
  - Environmental Issues
  - Aesthetics
  - No brown out

Initial Ideas
- Mow and Spray at the same time
- Simple Design
- Herbicide treatment without Brownout

Details of The Brown Brush Monitor

Another “Cool” Feature
Spray Deposition

Treated Vs. Untreated View

Treated with product and dye
Mowed only

Garlon 4 @ 5pts + Tordon 101M @ 1 gallon and Non-ionic surfactant @ 3pt + Bulls Eye dye @ 2oz/acre