Managing invasive weeds in CRP fields

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What are the goals of CRP?

- **Voluntary program designed to protect natural resources**

- **Plant long-term, resource-conserving cover** to improve the
  - quality of water
  - control soil erosion
  - ***enhance wildlife habitat (1991)***

- Provides participants with **rental payments** and **cost-share**

- Eligible practices include:
  - riparian buffers, wetland buffers, wildlife habitat buffers, filter strips, wetland restoration, grass waterways, shelterbelts, living snow fences, contour grass strips, and shallow water areas for wildlife.

CRP Management Restrictions

establishment years

1. Warm season grasses should not be seeded in dense stands of quackgrass

2. Mow to control weed competition during the seeding year

Red-winged Blackbird. (Photo by D. Dewhurst, USFWS)

- *Once desirable cover is established, weed management becomes more difficult partially due to the impacts on nesting birds.*

CRP Management Restrictions

after establishment

1. required to control invasive and weedy plant species *before they produce viable seed*
2. spot clipping or spot spraying is recommended
   - outside of the nesting period does not require prior approval by FSA.
3. without prior approval from the local FSA County Committee do not
   1. Spot clip or spray during the primary nesting season
   2. Disrupt cover on a reoccurring schedule or to a significant acreage of CRP cover
   3. Hay or graze the field (only allowed once every 3 years)

Why are some CRP fields so weedy?

1. Regulations setup for managing weeds prior to or during establishment

2. Expect continued management while enrolled

3. Diversity of plants present makes management difficult

4. No management without approval during primary nesting season (May 15th – Aug 1st)
   - Most weed species flower during this period
   - Spot mowing/herbicide is expensive

Invasive plants in CRP

proposed new guidelines for management

Four categories

1. No tolerance, must attempt to eliminate

2. Cannot go to seed, keep <10% coverage, no patch >1 A, individual species or in combination

3. Species of concern, keep <30% coverage, no patch >1 A, individual species or in combination (should not be an issue in properly established fields)

4. Woody species, keep <5% coverage, <5 ft tall, no patch >1 A (does not include leadplant & New Jersey tea)

Listed Plant Species for CRP

Category 1
Chinese lespedeza
Crown vetch
Giant hogweed
Hill mustard
Japanese knotweed
Multiflora rose
Poison hemlock
Teasel: cutleaf & common
Wild chervil

Category 2
Common tansy
Field bindweed
Garlic mustard
Hawkweeds
Japanese hedge parsley
Knapweeds
Purple loosestrife
Reed canarygrass
Reed grass, common
Spurge: leafy & cypress
Sweet clover: white & yellow
Thistle: Canada & marsh
Thistle: musk & plumeless
Wild parsnip

Category 3
Burdock
Canada goldenrod
Curly dock
Dames rocket
Giant ragweed
Queen Anne’s Lace

Keys to successful management of weeds in CRP fields

1. Identify the weed(s) species: → **WEED ID TOOL**
2. How and when the plant reproduces and spreads: → **WEEDOMETER**
3. Where the source of the infestation is: → **SCOUTING**
4. Select a control method that fits your situation: → **FACTSHEETS**
5. Monitor sites: → **SCOUTING**

New Weed ID TOOL

- First select weed type:
  - Broadleaf (forb)
  - grass
  - woody

What information can you enter?

- Where was it found?
- General characteristics
- Leaf characteristics
- Stem characteristics
- Floral characteristics

Where was the weed found?

Agriculture field:	no selection
natural and grazed areas (non-crop):	no selection
Urban:	no selection

General characteristics

Habit:	no selection
Duration:	no selection

when weeds reproduce and spread:

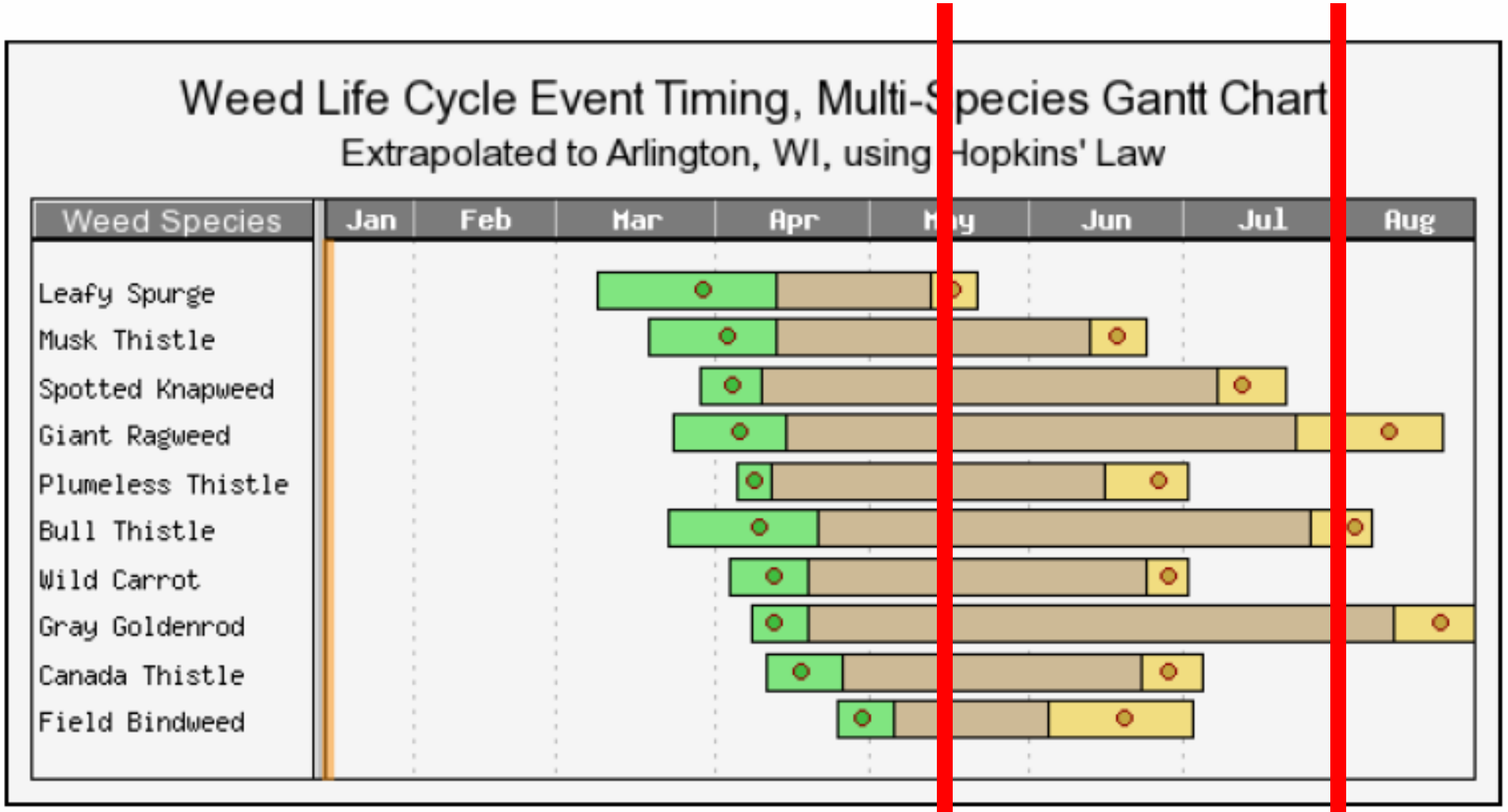
WEEDOMETER

- CRITICAL INFORMATION TO DEVELOP MANAGEMENT PLAN
- DOES IT FLOWER DURING RESTRICTED TIMING?

- http://weedometer.net
  - Plots time of emergence & flowering
  - Estimates for difference locations

Weedometer

NESTING PERIOD=May 15 – Aug 1



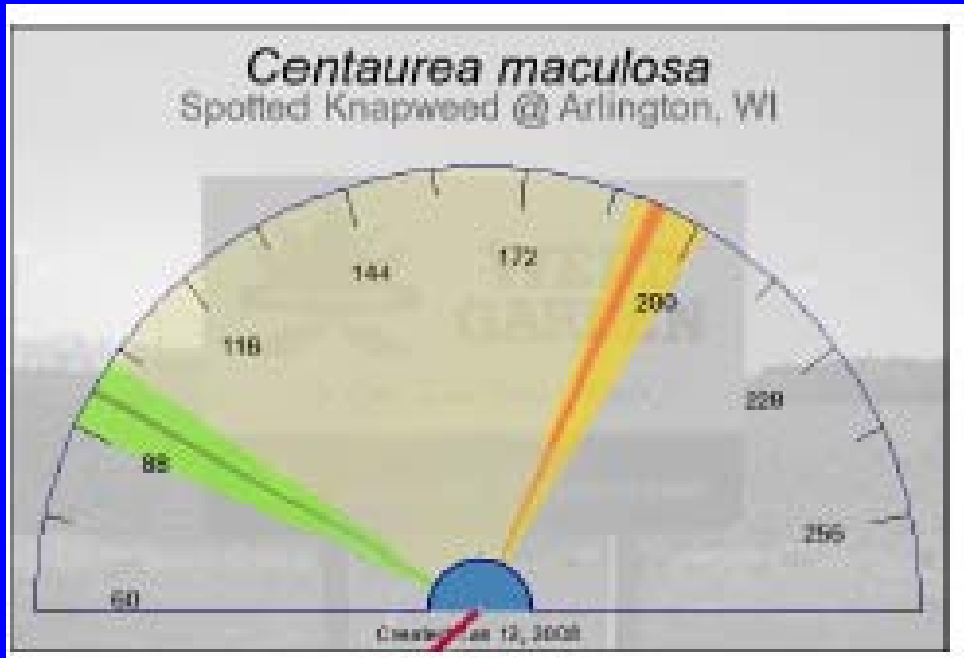
Weedometer

Spotted knapweed example

- Germination/emergence varies by location
  - Arlington=Apr 4th (3/29-4/10)
  - Stevens point = Mar 30th (3/24-4/5)
  - Lacrosse = Apr 8th (4/1-4/13)

- When weeds flower?
  - Arlington= Jul 3rd (7/7-7/17)
  - Stevens point = Jul 14th (7/5-7/21)
  - Lacrosse = Jul 3rd (7/1-7/14)

- http://weedometer.net/

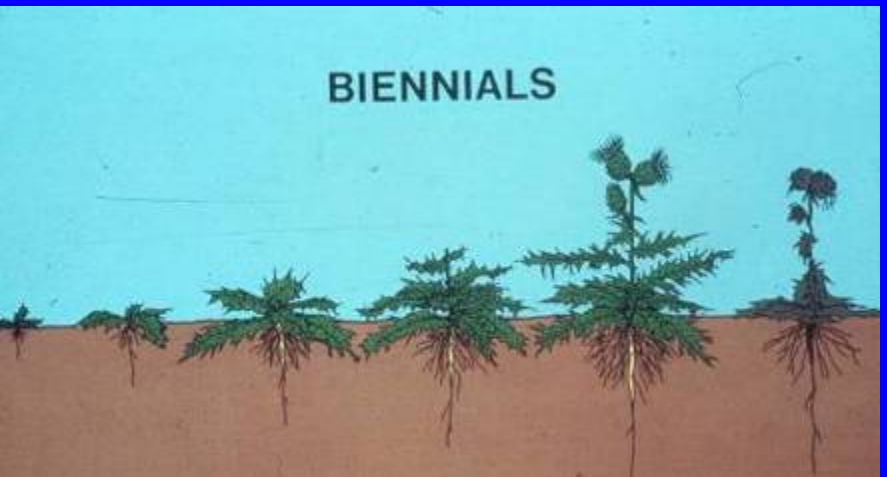


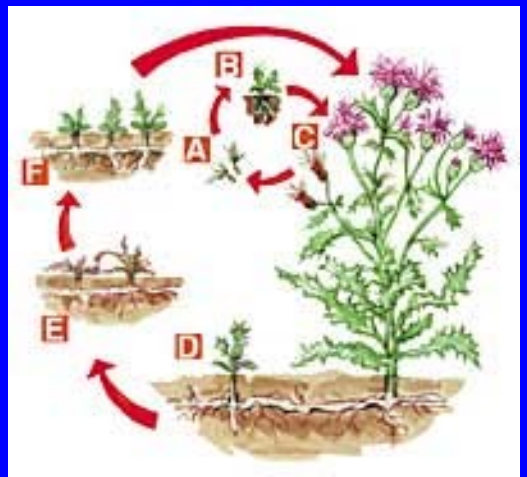
NESTING PERIOD = 5/15-8/1

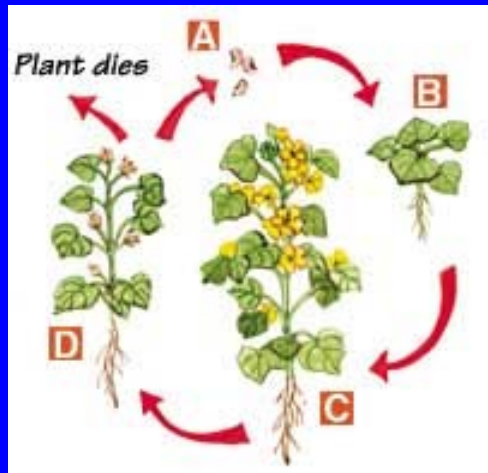
Appropriate management method

- INFORMATION AVAILABLE THIS WINTER
  - 5 Factsheets for landowners overview management options for weeds by life-history
  - Detailed herbicide information and efficacy factsheet

  - **<u>Look for release on Wisconsin Crop Manager</u>**







Weed management opportunities for CRP fields

preparation and planting

- ***<u>Best time for weed management</u>***
- Learn what weed species are present/nearby BEFORE planting CRP field
  - Some weed species are nearly impossible to manage after desirable species are established

Options if have difficult to control weeds present

- Typically perennial weeds with large stores of underground reserves
  - Difficult to eradicate (53% perennials)
- Manage before plant desirable species
  - Keep field fallow and manage weeds intensively for 1-2 years
  - Plant, grow and harvest a crop on field for 1-2 years

Weed management in establishment phase

- Important timing, but difficult because desirables mixed in with weed species
- ***Wildlife restriction period not in effect for during establishment***
  - Intensive scouting and management
  - Some weed species (annuals) may not impact establishment as much as others


2 months after planting
Date of picture 7/5/07


4 months after planting
Mowed once
Date of picture 9/6/07

Timeline of when appropriate methods should be used

Nonselective weed management methods

Selective weed management methods (SPOT TRTS ONLY)

PLANTING MIXTURE OF GRASSES AND FORBS

		MOW*	
SPOT	***SPOT***	***SPOT***	***SPOT***
Site prep	planting	Establishment	End of contract

Time →

* During establishment mowing can be conducted during nesting season

Timeline of when appropriate methods should be used

Nonselective weed management methods

Selective weed management methods (SPOT TRTS ONLY)

PLANTING MIXTURE OF GRASSES AND FORBS

		MOW *	**MOW/DISK/ BURN/HERB**	
SPOT	***SPOT***	***SPOT***	***SPOT***	***SPOT***
Site prep	planting	Establishment	Mid-management (yr 6-7)	End of contract (yr 7-10)

Time →

* During establishment, mowing can be conducted during nesting season

Mid-Management Practices for CRP

- Many CRP fields have become dominated by grass species
- Mid-Management Practices are designed to encourage a diverse broadleaf/legume community
- conducted in the 6th year of contract or first year of renewed contracts
- Management methods: Mowing, disking, herbicide, burning, interseeding
  - Do not conduct during primary nesting season (5/15-8/1)

Summary

- Weeds can establish and be problematic in CRP fields
- The optimal time for management is prior to establishing desirable cover
- A wide range of management options are available, choose the method(s) that fit your field and weed problem
- **CONSULT WITH FSA!**
- Mid management practices will be another critical time for management

Questions?