# Dane County LWRD LMPN AIS Program

Clean Boats Clean Waters

**Aquatic Plant Management** 

Rapid Response

**Common Carp Removals** 

Partnership with Upper Sugar River Watershed Association PLS Biocontrol Best Practices Trifold

Butterfly Dock Treatment Township Invasives Mapping Streambank Inventories

TU Workdays Mobile Mapping Tool



## Dane County CBCW 2011-2022

- Watercraft Inspections
- Boater Education
- Observation/Data Entry
- Distribution of Program Materials
- Face to Face Messaging



### Clean Boats Clean Waters





# Dane County LWRD APM



## Dane County Aquatic Plant Management Program

#### Dane County

#### AQUATIC PLANT MANAGEMENT PLANS



- Fish Lake/Crystal Lake
- Lake Kegonsa/Lower Mud Lake
- Lake Mendota
- Lake Monona
- o Jenni & Kyle Preserve Ponds
- o Tenney Park Lagoon
- o Vilas Park Lagoon
- Warner Park Lagoon
- Verona Quarry
- Lake Waubesa
- Lake Wingra

- Flood Mitigation (Keep Water Flowing Through the Yahara River)
- Recreation, Navigational and Beach Access
- Shallow Cuts and Filamentous Algae Control
- Special Events

## **Aquatic Plant Benefits**

- Support wide range of invertebrates
- Provide food and shelter for fish, reptiles, amphibians, birds and mammals
- Improve water quality
- Protect shorelines
- Aesthetics





# APM Operations Staff & Equipment

5 FTEs

24 LTEs

12 Harvesters

3 Barges

1 Transport Barge

# Barge Pick-Up

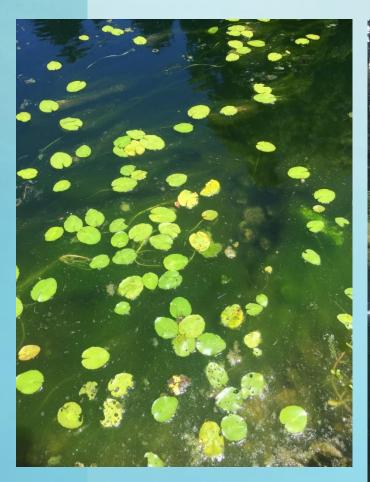
Madison
Monona
Westport
FOLKS
Lake Waubesa
Conservation Assoc.



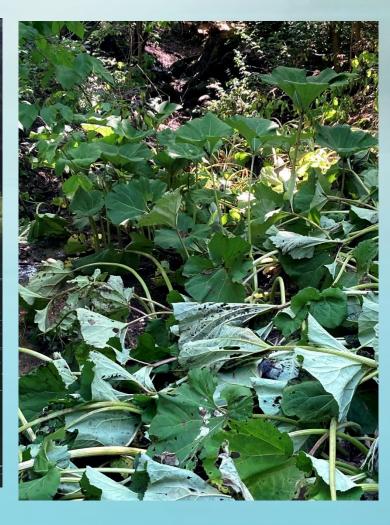
### No Harvest In:

- Areas less than 3' of water
- Between piers or docks of riparian owners
- Areas with known obstructions or hazards
- Areas identified as sensitive or ecologically significant (typically undeveloped shorelines)
- Any exceptions to the above are made in consultation with the LWRD Assistant Director, Lake Operations and WDNR Fisheries and Water Quality Biologists

# Rapid Response-Yellow Floating Heart/Butterfly Dock







# Purple Loosestrife Biocontrol





### Trifold Guide for Munis



### Wild Parsnip

#### **Identifying Characteristics**

- Up to 5' tall ridged stems
- Flat cicular clusters of tiny yellow flowers, late spring to mid-summer
- Leaves with 2-7 pairs of leaflets

#### Mowing Recommendation

90-100% effective in year of mowing when timed right after emergence of main flowerhead. Repeat mowing of resprouts if concerned about seed production. Need to repeat for 3-5 years to reduce population.



Teasels
Dipsacus spp.

#### **Identifying Characteristics**

- · 2-6' tall spiky stems
- egg-shaped spiky flowerhead with tiny purple or white flowers
- Opposite leaves clasp stem

#### Mowing Recommendation

90-100% effective in year of mowing. Time just after flowerheads open but before seeds enlarge. Repeat mowing of resprouts if concerned about seed production. Need to repeat for 3-5 years to reduce population.

### Purple Loosestrife Lythrum salicaria

#### **Identifying Characteristics**

- 3-9' tall
- Spikes of magenta flowers in mid-late summer
- Opposite leaves 1-4" long

#### Mowing Recommendation

50-70% effective in year of mowing. To prevent seed production, mow in late summer after flowers emerge, before seeds produced. To suppress population, mow 3x/season starting in late spring and repeated before flowers form.

### Knotweeds Fallopia spp.

#### **Identifying Characteristics**

- Arching, bamboo like stems
- · Up to 10'+ tall
- Spade shaped leaves 4-6"+ long & 3-4'+ wide
- Spikes of tiny whitish flowers in late summer

#### Mowing Recommendation

50-70% effective in year of mowing. Mow at least 4x/year, whenever plants reach 2-3' tall, repeating through fall. Need to collect cut material and burn or dispose in landfill to prevent resprouts.

## Non-native Phragmites

#### **Identifying Characteristics**

- 3-20' tall grass in dense stands
- Dense feathery plumes of flowers mid-summer to fall
- Leaves blue-green

#### Mowing Recommendation



NOT EFFECTIVE AS STAND-ALONE METHOD. May use mowing to remove biomass of dead standing stalks after herbicide treatment.

#### Chemical Recommendations for Foliar Herbicide Applications

#### Broadcast:

Escort @ 0.5 oz wt/A or Opensight @ 2 fl oz/A or TerraVue @ 2.85 oz wt/A

#### Spot:

Escort @ 0.04 oz/gal

#### Broadcast:

Escort @ 0.5 oz wt/A or Opensight @ 2 fl oz/A or TerraVue @ 2.85 oz wt/A

#### Spot:

Escort @ 0.04 oz/gal

#### Broadcast:

Arsenal/Habitat @ 12 fl oz/A

Spot:
Arsenal/Habitat @ 0.5-1% v/v

### Milestone @ 14 fl oz/A Spot:

Milestone @ 0,4% v/v

Broadcast:

#### Broadcast:

Rodeo @ 96 fl oz/A

#### Spot:

Arsenal/Habitat 1-1.5% v/v or Rodeo @ 2-3 % v/v

# Common Carp Removal-Indian Lake



### Points to Ponder.....



- Invasives now estimated to exceed \$150 Billion for management annually in U.S.
- New arrivals to the Great Lakes once every 30 days!
- May result in significant ecological regime shifts in lakes and rivers
- Dane County is in a prime geographic location for invasive species introduction
- Dane County is considered a "Super Spreader"
- Watercraft sales at an all time high
- Licenses sales locally and nationwide have risen over 25%
- Changing climatic conditions including flooding creating more pathways and dispersal mechanisms
- Continue CBCW program including expansion with volunteer networks
- Work with partners to respond to new and emerging threats
- Updating the Dane County AIS Plan
- Maintain core conditions of LMPN funding