



INVASIVE SPECIES

2024
CALENDAR

Minnesota Invasive Species
Advisory Council

Advisory Council

This calendar was produced and distributed by the Minnesota Invasive Species Advisory Council (MISAC). MISAC is a statewide entity that:

- Promotes communication and cooperation among organizations involved in invasive species issues.
- Coordinates outreach on invasive species.
- Supports statewide and multi-state conferences related to invasive species issues.
- Supports trainings and field visits related to invasive species.
- Recognizes outstanding and noteworthy work related to invasive species and encourages such work through the Carol Mortensen Award.
- Advocates for research and management for the species and pathways deemed greatest risk.

The MISAC website (www.mninvases.org) provides additional information about invasive species in Minnesota. This website is a gateway to invasive species information including species profiles, contact information for experts in Minnesota, and links to other related websites.

MISAC Mission Statement

To provide leadership to prevent the introduction and spread of aquatic and terrestrial invasive species and reduce their harmful impacts on Minnesota landscapes, economies, and the people of Minnesota by promoting invasive species awareness, prevention, and management through research, education and regulation in cooperation with local, state, tribal, and federal partners.



Invasive Species Threats

Invasive species are non-native plants, animals and pathogens that cause environmental damage, economic loss, or harm to human health. These pests can displace native species, harm habitats, and degrade natural, managed, and agricultural landscapes.

In addition to harming our natural resources, invasive pests can pose serious economic threats to major Minnesota industries such as agriculture, tourism, and forestry. Some estimates peg the economic damage of invasive pests in the U.S. at more than \$130 billion a year.

Public awareness and action are the keys to preventing the spread of invasive species. Please use the information in this calendar to help inform the public about the invasive species problem and how they can take action to reduce invasive species spread and harm.

Find contact information for three agencies with invasive species responsibilities in Minnesota on the back of this calendar. These agencies, as well as other MISAC members, can provide informational products such as brochures, species identification cards, and videos about invasive species.

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The information contained in this document is current as of the date of publication. Because laws can change, it is important to check to see if there have been any changes or updates to applicable laws and regulations.

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This information can be made available in alternative formats such as large print, braille or audio tape by emailing info.dnr@state.mn.us or by calling 651-259-6157.

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Report Invasive Species

One of the keys for a rapid response to invasive species is the early identification of new occurrences. Please report occurrences of invasive species in Minnesota to the following:

- Minnesota Department of Agriculture (MDA) Report a Pest at: 888-545-6684 or reportapest@state.mn.us to report invasive plants, insects, or diseases such as Palmer amaranth, Asian longhorn beetle, emerald ash borer, boxwood blight and sudden oak death.
- Minnesota Department of Natural Resources (DNR) Invasive Species Program at: 651-259-5100 or 888-646-6367 to report invasive aquatic plants or wild animals such as Eurasian watermilfoil, zebra mussels, invasive carp, round goby, jumping worms and mute swans.
- EDDMapS website or EDDMapS app at: www.eddmaps.org
- Or, as specified for individual species in this calendar.

MISAC Members

The Minnesota Invasive Species Advisory Council includes these members: 1854 Treaty Authority, Association of Minnesota Counties, Carver County Water Management Organization, Conservation Corps of Minnesota and Iowa, Fond du Lac Band of Lake Superior Chippewa, Grand Portage Band of Lake Superior Chippewa, Hennepin County Public Works, Lake County Soil & Water Conservation District, Leech Lake Band of Ojibwe, Meeker County AIS, Metropolitan Mosquito Control District, Minneapolis Park and Recreation Board, Minnesota Aquatic Invasive Species Research Center, Minnesota Association of County Agricultural Inspectors, Minnesota Board of Water and Soil Resources, Minnesota Department of Agriculture, Minnesota Department of Natural Resources,

Minnesota Department of Transportation, Minnesota Invasive Terrestrial Plants and Pests Center, Minnesota Nursery and Landscape Association, The Nature Conservancy, Three Rivers Park District, University of Minnesota, University of Minnesota—Extension, University of Minnesota Sea Grant Program, U.S. Customs and Border Protection, U.S. Department of Agriculture—Animal Plant Health Inspection Service—Plant Protection and Quarantine, U.S. Department of Agriculture—National Resources Conservation Service, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. National Park Service, Wild Rivers Conservancy, and Wildlife Forever.





PARTICIPATORY SCIENCE

Olmsted County Creative Clovers 4-H Club surveys a stream for mystery snails.

What is participatory science?

According to the Environmental Protection Agency, participatory science “engages the public in advancing scientific knowledge by formulating research questions, collecting data, and interpreting results.”

University of Minnesota Extension TIPS program

Terrestrial Invasive Participatory Science (TIPS) program staff and agency partners annually assess priority invasive plant and insect concerns and information gaps and opportunities for participatory science. Volunteers frequently help inform the distribution and density of species in Minnesota. For example, community-generated data about Amur corktree confirmed specimens planted as males produced seed, potentially enabling spread of an invasive species. This informed a change to the Minnesota Noxious Weed List. Other projects increased understanding of complicated multi-species interactions of invasive species in native ecosystems. Outcomes have included development of a DNA test for red mulberry, a rare native tree, and work towards development of butternut canker resistant trees.

Starry Trek

The Starry Trek participatory science program is a partnership between the Minnesota Aquatic Invasive Species Research Center, University of Minnesota Extension, local partners, Minnesota Department of Natural Resources, and hundreds of volunteers. In this annual one-day event, volunteers search hundreds of public water accesses for aquatic invasive species. Since the program’s launch, volunteers have discovered the first detection of prohibited invasive species at various waterbodies, including four populations of starry stonewort, one zebra mussel population, and three new Eurasian watermilfoil discoveries.

Further information:

- TIPS: z.umn.edu/iscitsci
- Starry Trek: www.starrytrek.org

JANUARY

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1 New Year's Day	2	3	4	5	6
7	8	9	10	11	12	13
14	15 Martin Luther King Jr. Day	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3



SUPPORTING WILDLIFE IN YOUR BACKYARD

Carolina chickadee

What is the problem?

Most insects have co-evolved with native plants, becoming specialized to only eat one plant species or group of plants. Replacing native plant communities with ecological deserts of lawns and non-native species removes the habitats and food resources insects and other wildlife require to live. Most of these non-native plants only impact the urban/residential areas, but some spread to the surrounding habitats and displace native plant communities.

Impacts:

Insects are the main vector to transfer nutrients and energy from plants to animals. With the loss of insect biodiversity and biomass across the globe, loss of amphibians, reptiles, mammals, and birds are likely. Over time, we could lose important ecological functions, such as pollination services.

Case study:

Research conducted by Dr. Doug Tallamy, Dr. Desirée Narango, and Dr. Peter Marra has shown that when more than 30% of an area's plants are non-native species (including lawns), the Carolina chickadee population plummets. Adult Carolina chickadees were not affected (possibly because they might compensate with bird feeders), but fledgling production declined as people landscaped with more non-native plants.

How can people help?

- Landscape with native plants in your yard. According to Dr. Tallamy, we have transformed 40 million acres (about the size of New England) into lawns. If we convert half of our lawns to native plants, we dramatically increase wildlife habitat.
- Remove invasive plants from your yard.

Further Information:

- homegrownnationalpark.org
- bluethumb.org/lawns-to-legumes
- dnr.state.mn.us/gardens/nativeplants/suppliers.html

FEBRUARY

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14 Valentine's Day	15	16	17
18	19 Presidents' Day	20	21	22	23	24
25	26	27	28	29	1	2



MINNESOTA DNR INVASIVE SPECIES RULEMAKING

The DNR Rulemaking process helps to protect places like this lake in the Boundary Waters Canoe Area Wilderness.

The Minnesota Department of Natural Resources (DNR) may classify certain species of aquatic plants and wild animals as invasive species to help protect Minnesota's resources.

The DNR evaluates non-native species for how likely they are to be introduced, survive, and spread in Minnesota and their potential impacts to Minnesota's natural resources and human health. Invasive species are listed in Minnesota Rules (parts 6216.0250-6216.0270), so to change the species lists the DNR must follow a formal rulemaking process, which includes a public comment period and review by an Administrative Law Judge before the rules can be changed.

What changes were proposed in 2022?

In 2022, the DNR proposed to classify thirteen species or species groups as prohibited invasive species to protect Minnesota from potential harm from these species.

- common reed—non-native subspecies (*Phragmites australis* subspecies *australis*, not including *Phragmites australis* subspecies *americanus*)
- eastern mosquitofish (*Gambusia holbrooki*)
- golden clam (*Corbicula fluminea*)
- golden mussel (*Limnoperna fortunei*)
- jumping worms (*Amyntas* and *Metaphire* species)
- marbled crayfish (marmorkrebs) (*Procambarus virginalis* or *Procambarus fallax forma virginalis*)
- mitten crabs (*Eriocheir* species)
- Nile perch (*Lates niloticus*)
- snakehead fish (*Channidae* family)
- tench (*Tinca tinca*)
- tubenose gobies (any fish belonging to the genus *Proterorhinus*)
- walking catfish (*Clariidae* family)
- yellow floating heart (*Nymphaoides peltata*)

Further information:

- Sign up for email updates from the DNR, including updates about rulemaking efforts: mndnr.gov/AIS
- Current list of species: mndnr.gov/invasives/laws.html
- 2022 Rulemaking: mndnr.gov/invasives/invasive-species-program-2022-prohibited-invasive-species-rulemaking.html

MARCH

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26	27	28	29	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
Daylight Saving Time Begins						
17	18	19	20	21	22	23
St. Patrick's Day		Spring Equinox				
24	25	26	27	28	29	30
Easter 31						



RESEARCH ON USING GOATS TO MANAGE BUCKTHORN

What's the problem?

Invasive terrestrial plants harm native vegetation, interfere with recreation, and incur high control costs. The expense of conventional control, such as herbicide treatment, has led land managers to try novel approaches. One tactic gaining in popularity is livestock grazing to target invasive plants. In Minnesota, goat browsing of invasive woody shrubs is an example of this strategy.

Are goats the solution?

Researchers at the University of Minnesota studied the effectiveness of goats for controlling the invasive shrub common buckthorn (*Rhamnus cathartica*), and associated responses of native vegetation. Immediately after browsing, steep reductions in buckthorn abundance and native plants were observed. However, one year later, both buckthorn and native plants had largely rebounded to pre-browsing levels.

Following three years of browsing, a more sustained increase in native plant diversity was observed, highlighting the need for longer-term studies. Importantly, the team showed goats are unlikely to spread buckthorn through their feces, as seeds were overwhelmingly destroyed during digestion. Results indicate that goat browsing can be a potentially useful component of a broader woodland restoration strategy, but on its own is unlikely to yield lasting benefits.

What can people do?

Managing invasive shrubs like common buckthorn requires multiple approaches employed strategically over a sustained timeframe. Goat browsing can be part of a broader effort, but additional actions to reduce buckthorn populations and support native vegetation recovery are needed.

Further information:

mitppc.umn.edu/research/research-projects/goat-grazing-invasive-plant-control

Funding for this project is provided by the Minnesota Invasive Terrestrial Plants and Pests Center through the Environment and Natural Resources Trust Fund.

APRIL

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15 Tax Day	16	17	18	19	20
21	22	23	24	25	26 Arbor Day in Minnesota	27
28	29	30	1	2	3	4





MODIFIED-UNIFIED METHOD FOR INVASIVE CARP

What is it?

The Modified-Unified Method or MUM was first developed by the U.S. Geological Survey (USGS) from traditional Chinese fishing techniques. The MUM uses electricity, sound, and strategically-placed nets to herd fish towards an encircling net where they are captured. Invasive carp are removed or tagged and released to track their movements. Any native fish are returned to the water.

This method was originally developed for locations where invasive carp are at high density. Minnesota DNR has been working with USGS to adapt the MUM for Minnesota's low-density population of invasive carp. New techniques are tested at each MUM event.

Where is the MUM held?

MUM events have been held in the Mississippi River each spring and fall since 2021. The first Minnesota MUMs were located in Pool 8 near La Crosse, Wisconsin, while more recent events include Pools 5A-8.

Who participates in the MUM?

The MUM events in Minnesota are led by Minnesota DNR in partnership with Wisconsin DNR, U.S. Fish and Wildlife Service, USGS, National Park Service, and Wild Rivers Conservancy.

What should I do if I capture an invasive carp?

Invasive carp captures must be reported to the DNR immediately. Call 651-587-2781 or email invasivecarp.dnr@state.mn.us. Take a photo and make arrangements with the DNR to transport the carp to the nearest fisheries office. DNR can issue a permit to keep the captured invasive carp for personal use if certain conditions are followed.

Further information:

mndnr.gov/invasivecarp

MAY

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	1 Arbor Month in MN Begins	2	3	4
5 Cinco de Mayo	6	7	8	9	10	11
12 Mother's Day	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27 Memorial Day	28	29	30	31	1



SALT CEDAR

Tamarix ramosissima

Keys to ID:

- Deciduous foliage looks scaly and similar to red cedar.
- Flowers are showy and pink in branching clusters.
- Branches are slender and smooth with a reddish-brown color and tend to break off easily.

What is it?

Saltcedar is a perennial tree or shrub.

Origin:

Western Europe and the Mediterranean to North Africa, northeastern China, India and Japan

Impacts:

- Displaces native plant species.
- The leaves excrete salt and salt covered leaves collect on the soil surface, increasing salinity of the soil.
- Increases erosion and flooding.
- The main taproot of saltcedar extends deep to the water table, and while actively growing, a single plant can use large amounts of water which can then be transpired into the atmosphere. Sites invaded by saltcedar typically become much drier and stream flows are reduced.

Status:

While widespread across the western United States, saltcedar has limited distribution in Minnesota.

Where to look:

Riparian areas

Regulatory classification (agency):

Saltcedar is a *restricted noxious weed* (MDA). The importation, sale and transportation of propagating parts is prohibited.

Means of spread:

Saltcedar produces large amounts of viable seed that is dispersed by wind and water. Adventitious roots growing from stems can break off and be carried downstream to new locations and sprout new plants.

How can people help?

- Report plants growing where they have not been planted to eddmaps.org
- Plant native species.

Further information:

mda.state.mn.us/saltcedar

JUNE

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
Father's Day			Juneteenth National Independence Day	Summer Solstice		
23	24	25	26	27	28	29
30						



WATER GARDENING PATHWAY

Parrot's feather

JULY

Example species:

Water hyacinth (*Eichhornia crassipes*) and parrot's feather (*Myriophyllum aquaticum*)

What is the problem?

Parrot's feather and water hyacinth are primarily sold as ornamental plants for use in water gardens. They were both found in the Mississippi River near Winona in 2012. In other states these species have formed dense mats that compete with native aquatic plants and interfere with boating.

Other water garden plants such as Java waterdropwort, European waterclover, water lettuce, hybrid water lilies, and non-native fish like goldfish have also been found in state waters, due to accidental or deliberate releases from water gardens.

Regulatory classification (agency):

Both water hyacinth and parrot's feather are *regulated invasive species* in Minnesota (DNR). It is legal to buy and plant them in your personal water garden (that is not connected to state waters), but it is illegal to introduce them into state waters.

Means of spread:

Water garden species are primarily spread through accidental and intentional release by people. Seeds or plant fragments can spread plants to new areas.

How can people help?

- Build water gardens away from other waters and areas prone to flooding.
- Before planting, inspect and rinse aquatic plant orders to remove seeds, snails and other hitchhikers. Dispose of hitchhikers in the trash.
- Do not dispose of plants or animals in or near natural waters.
- Report suspected infestations to the DNR.

Further information:

dnr.state.mn.us/invasives/responsible-consumers.html

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	1	2	3	4 Independence Day	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3



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 DO NOT RELEASE FISH AND AQUATIC PLANTS



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AMUR CORKTREE

Phellodendron amurense

Keys to ID:

- The inner bark is a striking yellow color.
- Leaf scars are raised and horseshoe shaped.
- Opposite, occasionally appearing sub-opposite, branching structure.
- Compound leaves with a turpentine or citrus-like smell when crushed.
- Green berry-like drupe fruits ripen to a dark purple-black in the fall and persist into winter.

AUGUST

What is it?

Amur corktree is a deciduous tree that can grow 45 feet tall. Its bark is corky or spongy. It is dioecious, meaning it has separate male and female plants. However, at least one variety of presumed male Amur corktree has produced seed.

Origin:

China and Japan

Impacts:

In Minnesota, it can grow densely in forested areas. It impacts oak and hickory regeneration in woodlands. It has allelopathic (chemical) properties that can limit the growth of native understory plants, shrubs, and trees around it. Its fruits are less nutritious to wildlife than native forage.

Status:

Amur corktree grows well in disturbed areas and is tolerant of drought and pollution so it is commonly found in urban landscapes.

Where to look:

Look for small sprouts underneath planted Amur corktrees and for plants at natural areas nearby.

Regulatory classification (agency):

Amur corktree is a *specialty regulated plant* in Minnesota (MDA). Only sales of named male cultivars are permitted. Sales of all other *Phellodendron amurense* are prohibited. All fruit producing trees must be controlled, by tree removal or other means, such that no seed is disseminated.

Means of spread:

Birds readily eat the seeds and can spread the seeds significant distances.

How can people help?

- Report sightings of this tree outside of ornamental plantings to eddmaps.org or Report a Pest (mda.state.mn.us/reportapest).

Further information:

- dnr.state.mn.us/invasives/terrestrialplants/amur-cork-tree.html
- mda.state.mn.us/amur-corktree

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	1	2	3
	 <small>www.mda.state.mn.us/reportapest</small>					
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



STARRY STONEWORT

Nitellopsis obtusa

Keys to ID:

- Bushy, bright green macro-algae (larger sized algae; plant-like) with whorled branchlets.
- White, star-shaped bulbils the size of a grain of rice form on clear threads at the base of the stem.
- It looks similar to many native, beneficial grass-like algae, but can be distinguished by its star-shaped bulbils.



Starry stonewort bulbils

What is it?

Starry stonewort is a macro-algae in the *Characeae* family.

Origin:

Europe

Impact:

- Impedes recreation by forming dense mats.
- Can outcompete native species making the habitat unsuitable for wildlife.

Status:

In Minnesota, it was first found in 2015 and has since been found in more than 20 waterbodies.

Regulatory classification (agency):

Starry stonewort is a *prohibited invasive species* (DNR).

How does it spread?

Starry stonewort is spread when fragments of the plant are moved to a new location on boats or gear. Once in a waterbody, these fragments can quickly start a new population. It grows very fast and does not have true roots so it can fragment further and spread around a lake with the water currents. It produces white star-shaped bulbils which sprout and form new plants.

How is it managed?

Diver Assisted Suction Harvesting (DASH) is one way that starry stonewort populations are controlled. A diver identifies the invasive species, then uses a suction hose attached to a special boat to remove the species from the area. The Leech Lake Band of Ojibwe, Division of Resource Management, Plant Resources Department is using one of these boats for restoration, early detection, and rapid response management of lakes that have been infested on the Reservation.

How can I help?

- Look for starry stonewort in your local waterbody. If found, report to the DNR or Tribal agency.
- Clean, drain, and dry your boat.

Further information:

dnr.state.mn.us/invasives/aquaticplants/starrystonewort/index.html

SEPTEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Labor Day	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22 Fall Equinox	23	24	25	26	27	28
29	30	1	2	3 	4	5



Healthy potato field

POTATO CYST NEMATODES

Globodera pallida and *Globodera rostochiensis*

Keys to ID:

- Infected plants are stunted and have yellow or brown, wilted leaves.
- Tiny cream to white (*G. pallida*) or yellow to gold (*G. rostochiensis*) bulb like structures can be seen emerging from roots. These are the female nematodes.
- Final identification can only be done through laboratory analysis.



Yellow potato cyst nematode females on a potato root.

What is it?

Potato cyst nematodes are small roundworms that feed on plants in the potato family.

Origin:

Andes mountains in South America

Impacts:

Potato cyst nematodes feed on plant roots, resulting in poor growth and reduced tuber production. In fields with high nematode populations, crop losses can be as high as 80%. Tomato, pepper, and eggplant can also be infected by potato cyst nematodes.

Status:

Potato cyst nematodes have been found on most continents where potatoes are grown. In the United States, a quarantine has confined potato cyst nematodes to a few counties in New York (*Globodera rostochiensis*) and Idaho (*Globodera pallida*). As of November 2022, neither species has been detected in Minnesota.

Where to look:

In potato fields, look for patches of poor plant growth, often with yellowed, wilted, or dead foliage. Fields planted to potatoes for consecutive years are most likely to support high nematode populations, once the pest is present.

Regulatory classification (agency):

Potato cyst nematodes are *federally quarantined pests* (USDA-APHIS).

Means of spread:

Cysts of potato cyst nematodes can be moved long distances on contaminated seed potatoes, infected plant material, and in soil on farm equipment.

How can people help?

- Plant clean potato seed and clean all equipment before entering and leaving a field.
- Potatoes should be grown in rotation with other crops.

Further information:

mda.state.mn.us/plants-insects/potato-cyst-nematode

OCTOBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
	Indigenous Peoples' Day					
20	21	22	23	24	25	26
27	28	29	30	31	1	2
				Halloween		

NEW ZEALAND MUDSNAIL AND FAUCET SNAIL

Keys to ID

New Zealand mudsnail

- Adults are small, up to 1/8-inch long
- Light to dark brown
- Shells are elongate with 4-6 whorls
- Have a trap door which covers the shell opening



Faucet snail

- Adults grow up to 1/2-inch long
- Light brown to black
- Shells have 7-8 whorls
- Have a trap door which covers the shell opening



Faucet snails

What are they?

Two small aquatic snails: New Zealand mudsnail (*Potamopyrgus antipodarum*) and faucet snail (*Bithynia tentaculata*).

Origin:

- New Zealand mudsnails are native to New Zealand.
- Faucet snails are native to Europe.

Impacts:

- Both snails spread quickly, often reach high densities, and outcompete native snails.
- Faucet snails clog water intakes and host parasites that kill waterfowl that consume them.

Status:

New Zealand mudsnails were first found in the Duluth-Superior harbor in 2005. Since then, they spread to several creeks in east-central Minnesota. Faucet snails were first discovered in the Duluth-Superior harbor and Mississippi River in 2006 and Lake Winnibigoshish and other waterbodies in that region in 2008.

Where to look:

Docks, rocks, and other hard surfaces along shorelines of lakes, rivers, and streams.

Regulatory classification (agency):

Both snails are *prohibited invasive species* (DNR).

Means of spread:

Mudsnails spread via fish shipments. Both snails spread by clinging to recreational fishing and waterfowl hunting gear, and research equipment.


How can people help?

- Inspect and remove visible animals, plants, and mud from waders, recreational equipment, and gear.
- Rinse everything with 120°F water, or dry equipment in heat or sun for several hours.
- Report these species to the DNR.

Further information:

- dnr.state.mn.us/invasives/aquaticanimals/nz_mudsnail
- dnr.state.mn.us/invasives/aquaticanimals/faucet_snail

NOVEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	29	30	31	1	2
3	4	5	6	7	8	9
Daylight Saving Time Ends		Election Day				
10	11	12	13	14	15	16
	Veterans Day		2024 Upper Midwest Invasive Species Conference November 12-14 Duluth, Minnesota and online			
17	18	19	20	21	22	23
24	25	26	27	28	29	30
				Thanksgiving	Day After Thanksgiving	



MINNESOTA MANAGEMENT PLAN FOR INVASIVE SPECIES

The Minnesota Management Plan helps to protect the lands and waters of Minnesota from the impacts of invasive species.

What is it?

The “Minnesota Management Plan for Invasive Species” provides a big picture framework to coordinate and guide efforts to prevent the introduction, reduce the spread, and promote the management of aquatic and terrestrial invasive species within Minnesota. The Minnesota Invasive Species Advisory Council (MISAC) recently completed a revision of the plan, including new sections on priorities for action, species threat ratings, gaps, climate resiliency, and tribal consultation as they relate to invasive species work.

There are four major plan elements:

1. Prevention
2. Early detection, response and containment
3. Management of invasive species
4. Leadership and coordination

How can people help?

Any entities or people in the state willing to help implement the plan are invited to participate. Successful implementation hinges upon partners’ participation. While most organizations working on invasive species issues are likely already implementing some of the actions listed in the plan, it may provide new ideas for additional projects, or a launching point for those who are just getting started.

Further information:

Visit mninvasives.org/stateplan to learn more and see how you can help implement the plan.

DECEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21 Winter Solstice
22	23	24 Christmas Eve	25 Christmas	26	27	28
29	30	31 New Year’s Eve	1	2	3	4



For more information about invasive species in Minnesota



Aquatic Plants and Animals
Minnesota Department of Natural Resources
Invasive Species Program
651-259-5100

University of Minnesota
Sea Grant Program
218-726-8106



Terrestrial Plants and Insects
Minnesota Department of Agriculture
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