

Common carp



The Problem with Common Carp in Utah's Ecosystems

In Utah's lakes and rivers, there is a fish causing big problems for the environment. This fish is called the common carp. Although it is not native to Utah, it has become a major threat to local ecosystems.

What is the Common Carp?

The common carp is a large fish that feeds at the bottom of lakes and rivers. It was first brought to the United States in the 1800s for food and fishing. Over time, it spread into many lakes and rivers, including those in Utah. Now, it is one of the most common invasive species in the state.

Why is the Common Carp a Problem?

Common carp are harmful because they change the environment around them. These fish eat the roots of aquatic plants and stir up mud from the lake or riverbed while feeding. This makes the water muddy, which blocks sunlight from reaching underwater plants that other animals need for food and shelter. Without enough plants, other fish and animals lose their homes and food sources.

Additionally, common carp reproduce quickly. They lay millions of eggs every year, making it easy for their population to grow out of control. As their numbers increase, the damage to the ecosystem gets worse.

How are People Solving the Problem?

The good news is that scientists and wildlife managers are working hard to solve the common carp problem. Here are a few ways they are trying to control this invasive species:

- **Fishing and Harvesting:** One common method is encouraging people to catch and eat common carp. In some areas, there are fishing tournaments where anglers can help reduce the carp population. Since common carp are edible, their meat is used in recipes and even sold to restaurants.
- **Fish Barriers and Traps:** In some lakes, wildlife managers use special barriers to keep common carp from moving into new areas. These barriers let native fish swim freely but keep carp from spreading. Traps are also used to catch carp and reduce their numbers.
- **Restoring Native Species:** Along with controlling carp, there are efforts to bring back the native species that were harmed by carp. This includes planting aquatic plants that provide food and shelter for native fish and other wildlife.

Conclusion

While the common carp is still a major problem in Utah's ecosystems, many efforts are underway to control their population and protect the environment. By using fishing programs, barriers, and plant restoration, we can help reduce the negative impact of this invasive species and keep Utah's ecosystems healthy. It reminds us how important it is to protect native species and keep invasive ones from taking over our natural world.

<https://wildlife.utah.gov/gslp/wetlands/management.html>

<https://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=4>

The Mountain Pine Beetle: A Growing Threat to Utah's Forests



What is the Mountain Pine Beetle?

In Utah's forests, there is a tiny insect causing big damage to the trees. This insect is called the mountain pine beetle. Although it is small, it has become a huge problem for many of Utah's pine forests. The mountain pine beetle is a small, dark beetle that lives in pine trees. These beetles are native to North America, but their numbers have been increasing in recent years, especially in Utah. The beetles lay their eggs under the bark of pine trees, and when the larvae hatch, they begin to feed on the tree. This feeding damages the tree's ability to take in water and nutrients, which eventually kills the tree.

Why is the Mountain Pine Beetle a Problem?

The mountain pine beetle is dangerous because it kills many pine trees quickly. When many trees die, it weakens the forest and changes the habitat for animals that depend on those trees for food and shelter. Dead trees also increase the risk of wildfires because dried-out trees can catch fire more easily, making wildfires larger and more dangerous.

The mountain pine beetle's population has grown so much that it affects whole forests. In some areas of Utah, forests that were once full of trees are now filled with dead, brown pines. This is bad for the environment and can hurt local economies, especially in places that rely on healthy forests for tourism, recreation, and timber.

How are People Solving the Problem?

Scientists and forest managers are working on several ways to manage the mountain pine beetle problem and protect Utah's forests:

- **Pine Tree Removal:** One way to reduce the spread of the mountain pine beetle is by removing infected trees. Removing a beetle-infested tree helps stop the beetles from moving to other healthy trees. Sometimes, trees that are at risk of being infested are also removed as a precaution.
- **Preventative Treatments:** Another method is using special treatments to protect healthy trees. Some trees are treated with insecticides to stop the beetles from attacking them. These treatments help reduce new beetle infestations in the forest.
- **Controlled Burns:** Some forest managers use controlled burns to clear away dead trees and reduce the buildup of beetle-friendly environments. By removing dead trees and thinning out the forest, they make it harder for beetles to find a place to live.
- **Tree Replanting:** After the beetles kill the trees, efforts are made to replant new, healthy trees. This helps restore the forest ecosystem and provide a future habitat for wildlife.

Conclusion

The mountain pine beetle is a serious problem for Utah's forests, but there are many ways to manage the damage and protect our trees. By removing infected trees, using treatments to prevent beetle attacks, and replanting new trees, scientists and forest managers are working hard to fight back against this tiny pest. It's important for everyone to understand the challenges posed by the mountain pine beetle and support efforts to keep Utah's forests healthy for future generations.

<https://ffsl.utah.gov/wp-content/uploads/Mountainpinebeetle.pdf>

https://apps.fs.usda.gov/r6_decaid/views/mountain_pine_beetle.html

The Quagga Mussel: A Threat to Utah's Waterways



Utah's lakes and rivers are home to many unique fish, plants, and other aquatic life. However, a tiny creature is causing major problems in these waterways. It's called the quagga mussel, and it is an invasive species that has been spreading throughout Utah, threatening the health of our aquatic ecosystems. The quagga mussel is a small, freshwater mollusk that is native to Eastern Europe. It was accidentally introduced into the Great Lakes in the 1980s, likely through ships that unknowingly carried mussel larvae in their ballast water. Over the years, quagga mussels have spread to other lakes and rivers across the United States, including Utah's Lake Powell and other waters. Quagga mussels attach to surfaces like rocks, docks, and boats, forming dense clusters. They filter large amounts of water in search of food, mainly plankton. While this might sound harmless, it disrupts the natural food chain and makes it harder for native species to survive.

Why is the Quagga Mussel a Problem?

The quagga mussel is harmful to Utah's ecosystems in several ways. One of the biggest problems is that quagga mussels eat large quantities of plankton, which are important food for many fish and other aquatic creatures. By filtering out too much plankton, quagga mussels take away the food that native species need to survive. Another issue is that quagga mussels reproduce quickly. A single mussel can produce millions of eggs in a year and spread quickly to new areas. Once they invade a waterway, they are hard to control or remove. They also attach to boats, docks, and other structures, causing damage by clogging pipes and water systems, which can be costly to repair.

Additionally, quagga mussels can disrupt the ecosystem in other ways. Their filtering process can make the water clearer, which allows sunlight to penetrate deeper into the water. This encourages the growth of harmful algae, which can create "algal blooms" that can be toxic to fish and other wildlife.

How are People Solving the Problem?

While quagga mussels are hard to control once they've spread, several methods are being used to try to limit their impact in Utah's waterways:

- **Boater Education and Clean-up:** A key way to stop the spread of quagga mussels is by educating boaters and anglers. People who visit Utah's lakes and rivers are encouraged to clean their boats and equipment before and after use. This helps prevent quagga mussels from hitching a ride to new locations. Many watercraft are checked for quagga mussels at boat ramps, and visitors must follow special cleaning procedures if their boats are contaminated.
- **Chemical Treatment:** In some areas, water managers use chemicals to kill quagga mussels in affected lakes and water systems. These treatments can help reduce the number of mussels but must be used carefully to avoid harming other aquatic life.
- **Monitoring and Research:** Scientists closely monitor Utah's lakes and rivers for quagga mussels. By studying their behavior and spread, researchers are working to develop new ways to control the mussels and protect local ecosystems.
- **Prevention and Barriers:** Efforts are also made to prevent the mussels from spreading to new bodies of water. In some places, barriers or screens are used to keep quagga mussels from entering certain areas, while additional research continues to explore more solutions.

Conclusion

The quagga mussel is a serious threat to Utah's waterways, but many efforts are in place to control its spread and minimize its damage. By educating the public, using chemical treatments, and monitoring affected areas, we can help protect Utah's ecosystems from this invasive species. It's important that everyone who enjoys Utah's lakes and rivers plays a role in keeping them healthy by following guidelines to prevent the spread of quagga mussels. Together, we can help preserve the beauty and balance of our state's aquatic habitats.

<https://extension.usu.edu/planthealth/research/quagga-mussel-and-zebra-mussel>

<https://stdofthesea.utah.gov/>

Understanding the Canada Thistle: An Invasive Species



What is Canada Thistle?

The Canada thistle, known scientifically as *Cirsium arvense*, is a plant that many people see as a problem. But what exactly is the Canada thistle, and why is it considered an invasive species? The Canada thistle is a perennial plant, which means it lives for more than two years. It can grow up to 3 feet tall and has purple flowers that bloom in the summer. The leaves are spiky and can be quite sharp, making them unpleasant to touch. The plant spreads quickly through its roots and seeds. One Canada thistle plant can produce thousands of seeds that can be carried by the wind, animals, or water, allowing it to invade new areas easily.

Why is Canada Thistle a Problem?

Canada thistle is considered an invasive species because it can take over land and harm local ecosystems. It often grows in fields, gardens, and pastures, where it competes with native plants for sunlight, water, and nutrients. This competition can lead to the decline of native plant species, which are important for local wildlife, including insects and birds. Moreover, farmers see Canada thistle as a major problem because it can reduce crop yields and make farming more difficult and expensive.

The plant is also hard to control. Its deep roots allow it to survive droughts and harsh weather, making it resilient against many forms of removal. If left unchecked, Canada thistle can dominate an area, creating a landscape that is less diverse and less healthy.

How are We Solving the Problem?

There are several ways to manage and control Canada thistle populations. One effective method is through Integrated Pest Management (IPM), which combines different strategies to reduce the plant's spread. This can include:

- **Mechanical Control:** This means physically removing the plant by pulling it up or mowing it down before it can flower and produce seeds. It is important to do this regularly to prevent regrowth.
- **Cultural Control:** This method focuses on improving the health of the soil and the growth of native plants. By planting native species that can compete with Canada thistle, we can help restore balance to the ecosystem.
- **Chemical Control:** In some cases, herbicides may be used to target Canada thistle specifically. However, this method should be used carefully to avoid harming other plants and wildlife.

Education and awareness are also crucial. By teaching people about the dangers of Canada thistle and how to identify it, we can encourage community efforts to control its spread.

Conclusion

The Canada thistle is an invasive species that poses a significant threat to native ecosystems and agricultural lands. Understanding what it is, why it is a problem, and how we can manage it is essential for protecting our environment. By working together and using a combination of methods, we can help control Canada thistle and preserve the health of our ecosystems for future generations.

[Invasive species map](#)

[Invasivespeciesinfo.gov](https://invasivespeciesinfo.gov)

[Youtube video](#)

The Sneaky Invader: Russian Olive Trees and Utah's Wild Spaces

Have you ever seen a tree with silvery leaves and reddish-brown berries growing near a river or stream in Utah? It might look pretty, but it could be a sneaky invader called the Russian olive!



What is a Russian Olive?

Have you ever seen a tree with silvery leaves and reddish-brown berries growing near a river or stream in Utah? It might look pretty, but it could be a sneaky invader called the Russian olive! The Russian olive is a small tree or shrub that was brought to North America from Europe and Asia. People planted it because it could grow in tough conditions and looked nice. But, like many things brought from other places, it started causing problems.

Why is it a Problem?

- **Water Hog:** Russian olives have deep roots that suck up a lot of water. This means less water for native plants, animals, and even us! In dry places like Utah, water is precious.
- **Crowding Out Natives:** These trees grow very densely, forming thickets. They block sunlight and take up space, preventing native plants from growing. This hurts the animals that rely on those native plants for food and shelter.
- **Changing the Soil:** Russian olives change the soil chemistry, making it harder for native plants to grow in the future.
- **Less Biodiversity:** When Russian olives take over, there are fewer different kinds of plants and animals. This is called a loss of biodiversity, and it makes ecosystems weaker and less healthy.
- **Thorny Troubles:** Russian olives have sharp thorns, which can make it difficult for people and animals to move around.

How is Utah Fighting Back?

People in Utah are working hard to control the spread of Russian olives and protect our native plants and animals. Here are some ways they are doing it:

- **Removal by Hand:** For smaller areas, people cut down the trees with saws and tools. This is often done by volunteers and park rangers.
- **Chemical Control:** Herbicides (chemicals that kill plants) are sometimes used to kill Russian olives. This is done carefully to avoid harming other plants and animals.
- **Mechanical Removal:** Heavy machinery, like bulldozers and excavators, can be used to remove large areas of Russian olives.
- **Restoration:** After removing the Russian olives, people plant native trees and plants to help the ecosystem recover.
- **Education:** Teaching people about the problems caused by Russian olives is important. This helps prevent them from being planted and encourages people to help with removal efforts.

What Can You Do?

- Learn to identify Russian olive trees.
- If you see Russian olives growing in your neighborhood or near a park, tell an adult or a park ranger.
- Volunteer to help with removal efforts. Many organizations organize volunteer days to remove invasive species.
- Plant native trees and plants in your yard.
- Spread the word! Tell your friends and family about the problems caused by invasive species.

By working together, we can help protect Utah's beautiful natural areas from the sneaky invader, the Russian olive, and keep our ecosystems healthy for everyone to enjoy!

[Invasive species government](#)

[YouTube video Russian Olive Tree](#)