



Utah's Efforts to Stop Invasive Mussels

Status report for 2011

During the 2008 legislative session, Utah lawmakers learned about a significant threat to the state's water supplies, irrigation systems, hydroelectric plants, recreation areas and aquatic wildlife. The Legislature took swift action to protect these critical resources from invasive quagga and zebra mussels. Lawmakers passed the Aquatic Invasive Species Interdiction Act and funded a multipronged education, detection and prevention effort.



Mussels will attach to surfaces in a contaminated water. They travel from one water to another on boats and other equipment. To remove them, boaters must use the Clean, Drain & Dry self-decontamination method or have their boats professionally cleaned with 140° F water.



It took only three months for mussels to completely cover and block this once-clean pipe. One breeding pair of invasive mussels produces more than a million offspring each season.

Funding, partnerships and progress in 2011

To continue fighting the invasive mussel threat, the 2011 Legislature approved \$1,350,000 in General Funds for FY 2012. Federal, corporate and water conservancy district partners also supported this effort and provided more than \$271,000 in additional funding. Using those funds, the Utah Division of Wildlife Resources (DWR) and its partners focused on inspection, education, decontamination and enforcement during the 2011 boating season. Working together, they:

- Screened 373,243 boats—and educated their owners—before they launched in Utah lakes and reservoirs.
- Decontaminated 9,114 boats that had recently boated in affected waters. Nineteen of those boats were encrusted with mussels, many of which were alive.
- Issued 8,249 informal notices of violation, 1,592 written warnings and 49 formal citations. Law-enforcement personnel had more than 18,700 contacts with boaters on this issue.
- Continued a coordinated, aggressive outreach and education effort, involving news media, Web content, brochures, boat-ramp signs and recreation area posters.

- Assigned and equipped a mix of seasonal and full-time personnel (primarily biologists, inspection technicians and conservation officers) to educate boaters and to inspect watercraft.
- Coordinated hundreds of volunteers, who donated thousands of hours toward education and prevention efforts.
- Provided an online Mussel-Aware Boater course that more than 4,200 boaters completed, 17 percent more than in 2010. They received a certificate that streamlined the launch process throughout the 2011 season.
- Sampled 92 waterbodies for the presence of invasive mussels and other invasive species.

Winning the fight against mussels

The DWR has made substantial progress in the state's fight against invasive mussels. Since 2008, mussel test results have ranged from "inconclusive" to "infested" at only eight Utah waterbodies. All of the other waterbodies remain unaffected.

Five of the affected waters have tested free of mussels for three years, so their status changed from "inconclusive" to "not detected" at the end of 2011. Two other waters—Red Fleet Reservoir and Electric Lake—tested clean this year for the third year in a row. Their status changed from "detected" to "inconclusive." Only Sand Hollow Reservoir continues to show evidence of quagga mussel DNA, although no mussels (in any stage of development) have been found since the original discovery of a single adult mussel in 2010.

Aquatic organisms sometimes need multiple transfers into a lake or reservoir in order to establish a thriving, reproducing population. The DWR believes that its aggressive containment efforts likely prevented mussels from entering the affected waterbodies.

Boater compliance and future efforts

In 2010, two online surveys revealed that the DWR's outreach and education work has been effective. More than 96 percent of boaters were aware of the mussel threat. The survey also revealed the following:

- Most boaters (85–100 percent) report that they completed and displayed their Decontamination Certification forms.
- Approximately 84–87 percent of boaters report that they decontaminated their boats.

The DWR wants to improve boaters' compliance, possibly through targeted law-enforcement efforts and additional media outreach. To fund this work—and to continue protecting Utah's waters, diversion structures and aquatic wildlife—the DWR hopes to maintain program funding in FY 2013.

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