

Invasive Species Threaten Native Virgin River Species

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inside stuff



People often ask me how native fish can live in the Virgin River when floods come our way. The answer? They have adapted to variable flows of local streams so they can put up with most of what happens. However, there are threats that they can't handle. One of the largest hurdles for many of our native species to overcome is invasive animals or plants moving in from other areas. Invasive species are defined as any species not native to an ecosystem whose introduction can cause economic and environmental harm or harm to human health. These species can include plants, animals or other organisms (i.e. microbes).

Along Washington County streams, fighting battles with invasive species is ongoing. Tamarisk, arundo, red shiner and fathead minnow are just a few that I will touch on here.

Tamarisk is the plant with fine, light green leaves that produces a pink/purple flower. It can take over an area. About seven years ago, St. George City estimated they had 1,500 acres of tamarisk. Since that time, armed with their own funds and grants, St. George has expended over \$750,000 to remove tamarisk and re-vegetate with native plants such as coyote willow, black willow and cottonwood. Tamarisk can cause:

- fast burning, hot fires that impact human life, wildlife and structures
- environmental ramifications including higher soil salinity levels and reduced wildlife habitats
- Tamarisk can use up to 200 gallons of water each day and can produce over 500,000 seeds each year
- other significant economic impacts

Arundo is a more recent invader to our area. Brought in from Asia to control erosion, it has already clogged riverbeds in California. Here in Utah it spreads through roots (rhizomes) and displacement during floods. Arundo is a tall bamboo-like reed that has been used in local landscaping. It is now showing up along the Virgin River. We would like to eliminate it before it becomes better established. Arundo does not provide habitat for birds due to its vertical growth, its roots are easily displaced during flooding, causing erosion, and it can use up to four times more water than native vegetation.

If these two plant species remain in our streams, homes and infrastructure could sustain significant damage when flooding such as we had in 2005 and 2010 occurs again.

When asking kids what they do with fish that they don't want any longer in their aquariums, most answer with the proper "don't release it into any pond, stream, river, creek or canal" which is exactly what I would hope. I have written previously in Virgin River Program newsletters (www.virginriverprogram.org) about red shiners and our 25-year effort to remove nonnative fish from the Virgin River in Washington County. Between 2008 and 2011, there were no nonnative fish in local rivers; however, the 2010 floods allowed them to advance out of Arizona and into Utah once again.

Thanks to the 2010 floods, a new aquatic invader showed up in our rivers – the fathead minnow. This small, 2-3 inch fish has both natural and "pretty" orange colorations. Likely the pretty one was stocked into a couple of private ponds in the Santa Clara Drainage some time ago. When the 2010 floods hit, the water flowed out of the pond with the fish and

downstream they went. Since each female can have up to 10,000 offspring a year, they established quickly.

So why should we care if these invasives cause problems with native species?

We have some interesting native (and endangered) species that depend on the areas where invasive species are being found. Invasive species make it impossible for our native species to survive.

We spend millions to remove them, not just to protect native species, but to protect our communities from flooding, fire and excessive water use. There are many different opinions on the benefits of native species and the efforts that everyone must undertake to protect them, but in the end, we are all working together to create a Washington County that is better for all life.

Virgin River Skimboard Classic

Location:
"The Waterfall"
at the intersection of
2700 E. & Waterfront Dr.

Fee:
\$15/person pre-registered
\$20/person day of event

Saturday, July 14th
9:00am Check-in
10:00am

Logos: City of St. George Leisure Services Department, Joshua Tree Products, menchie's, Adventure Plus, Red Hook Water Park, SANDY CREEK SKIMBOARDS

Register at the St. George Recreation Center for more information call 435-627-4560 or visit us online at www.sgcityrec.org