

The problem with bullfrogs

BY JAKOB SHOCKEY

In the mid 1800s, as streams of migrants poured into southern Oregon and northern California, driven by their hunger for gold, they brought with them another unrelenting appetite—for food.

As the first waves of fortune seekers arrived into areas with no agriculture and limited supplies, they turned en masse to the landscape to fill their bellies. Entrepreneurial hunters started furnishing the camps with game to augment the dry goods and whiskey from the eastern supply trains. Fresh protein was the hot commodity, and anything that could be easily caught was eaten.

Two of the native species that suffered most under this sudden onslaught of foraging were the California red-legged frog and the Oregon spotted frog, which were giggered and eaten by the hundreds of thousands. As the 1800s came to a close, native frogs quickly disappeared from the Pacific Northwest.

Looking to monopolize on this market for frog legs, a few would-be frog farmers decided to import the American bullfrog (native only to the eastern US) to California. These frog farms ultimately failed, due to the cannibalistic nature of the bullfrog, and the remaining frogs were released into nearby waterways.



Tonight's dinner? Photo: Huffington Post.

In the 1920s and 30s, another attempt was made to establish the bullfrog for its potential as a food source, this time by the Oregon Fish and Game Commission. Bullfrogs were bred at the McKenzie Trout Hatchery and stocked as a “game fish species” all around the state of Oregon. This effort, too, was ultimately abandoned. However, the bullfrog population was done needing help and exploded across the Pacific Northwest.

Bullfrogs can be found in ponds, rivers, streams, and wetlands across our region, and they have taken a huge toll on the recovery of native species like the California red-legged frog and western pond turtle. Bullfrogs are adept at living in degraded aquatic habitat, and they were turned loose on a riparian ecosystem still reeling from the enthusiastic blasting, digging and dredging for gold.

Like the largemouth bass (another introduced species), bullfrogs have a huge mouth and will eat anything they can fit into it, including fish, native frogs, baby

turtles, and ducklings. Even blackbirds and the western rattlesnake have been found in the stomachs of bullfrogs. Bullfrogs also reproduce at a much higher rate than any of the native frogs, aggressively outcompeting them for food and habitat. Private ponds and low-lying wetlands are especially susceptible to a bullfrog invasion.

There are a number of ways to rid your pond of bullfrogs.

Adults can be netted and giggered at night with a spotlight, or caught in the day by dangling a bare hook in front of their face. In Oregon there is no limit on the number of bullfrogs that can be taken and no license is required. Note the fishing regulations list for approved harvest methods.

Once adults are removed, your pond will still have a bank of maturing tadpoles. It is important to remove these as they become frogs over the next two years, or drain the pond to kill them. Over time, this will turn your pond or wetland into a refuge for native amphibians, reptiles and waterfowl. After removing the bullfrogs from my family's pond on Thompson Creek, we've had five or more western pond turtle hatchlings every year.

As landowners in this beautiful valley, there are important things we can do in stewardship of our land, like keeping star thistle out of the pasture and blackberries out of the creek. If you own a pond in our watershed, consider keeping the bullfrogs out too.

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Who you gonna call... for a natural resource complaint?

BY JANELLE DUNLEVY

Did you know that watershed councils, according to the Oregon Watershed Enhancement Board, are “locally organized, voluntary, nonregulatory groups established to improve the condition of watersheds in their local area”?

The Applegate Partnership and Watershed Council (APWC) is the Applegate's local organization dedicated to promoting ecological, economic and community well-being in the Applegate watershed through on-the-ground projects and strategic collaborations. We help develop natural resource projects that will benefit the watershed, private landowners, and local lands managed by county, state, or federal agencies.

What we, your local watershed council, do not do is conduct or initiate any regulatory action. We do not take complaints and pass them on to the appropriate agency. We do not come out and take photos or document issues that will lead to an enforcement action. But we *will* come out and give ideas for improvements or actions prior to violations of local natural resource laws occurring.

Common violations occurring in the Applegate and Rogue Basins include infractions of water rights laws, riparian vegetation removal (without a permit), water quality violations

(agricultural chemicals introduced into the water), in-stream fill and/or removal of gravel, and the taking of aquatic species (e.g., salmon and steelhead) outside of fishing regulations. Violations of natural resources can be civil or criminal, depending on the violation and the agency that regulates that law.

For example, a violation of the Department of State Lands removal-fill laws (Oregon Revised Statute 196.795-990)—removing or filling material in waters of the state without a permit—can be enforced as either a civil penalty or a misdemeanor crime depending on the culpability of the violator.

You might think this is a little extreme, but the first call you should make if you think someone is violating any state law (water rights, removal-fill, illegal take) is to the Oregon State Police Fish and Wildlife Division. They work with local agencies and can investigate the alleged complaint. Phone numbers for local agencies are listed below.

It also does not hurt to ask questions—all agency representatives are very knowledgeable and can help you determine if a violation has even occurred. Our best recommendation is to gather as much information about the potential issue as possible and try to talk to the people responsible for the questionable actions. They might

not even know that they are potentially violating a law.

So...who you gonna call?

- State-regulated natural resource violations and complaints: Oregon State Police Fish and Wildlife trooper Josh Nugent, Dispatch 541-776-6111
- Water Rights Violations: Jackson County Watermaster, 541-774-6880; Josephine County Watermaster, 541-479-2401
- Oregon Department of Environmental Quality Violations, 541-776-6010
- Oregon Department of Fish and Wildlife, 541-826-8774
- Oregon Department of Agriculture, 541-414-8797
- Jackson County Codes Enforcement, 541-774-6906. Online Complaint form: <http://jacksoncountyor.org/ds/Contact/Code-Enforcement>
- Josephine County Codes Enforcement, 541-474-5425. Online Complaint form: <http://www.co.josephine.or.us/Page.asp?NavID=937>

The APWC is available for questions, but please remember we are not a regulatory group and will not initiate any reports of violations with local regulatory agencies.

For more information about APWC and updates on our projects and upcoming events, please visit our website at www.apwc.info.

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Bullfrogs in the frying pan

Today, this “poor man's chicken” has fallen almost entirely off the Oregonian's menu, but without good reason. Wild-caught frog legs are much like chicken wings, except cleaner (no factory farming here), organic, and non-GMO. Plus, you can sit back with a belly full of this locally raised meat and feel smug about the positive impacts your dietary choice is having on the ecosystem. Frog legs are a light, buttery meat that taste like something between chicken and shrimp, and can be cooked as you would chicken wings. If this sounds like something you are willing to try, here's what you need to do:

- Find a pond overrun by bullfrogs and persuade nearby 13-year-old boys to catch and kill as many as they can. (In the absence of volunteer frog giggers, you may have to do this yourself.)
- Skin out the bullfrogs by making an incision all the way around their waistline.
- With pliers, pull the skin down and off the bullfrog's legs. Cut off the feet and cut the legs from the body.
- Trim off any remaining veins or organ tissue, and voilà, it looks like chicken meat.

Hank Shaw, author of *Hunt, Gather, Cook: Finding the Forgotten Feast*, shares this recipe for French-style fried frog legs on his blog, www.honest-food.net.

Prep Time: One hour, mostly for soaking the frog legs. Cook time: 15 minutes. Serves four.

Ingredients

- 1-1/2 to 2 pounds frog legs
- 1 cup milk
- 1 tablespoon salt
- 1 tablespoon black pepper
- 1 cup flour
- 10 tablespoons unsalted butter, divided
- 3 garlic cloves, sliced very thin
- 2 to 3 tablespoons lemon juice
- 2 to 3 tablespoons minced fresh parsley

Directions

Soak the frog legs in the milk in the refrigerator for an hour.

Meanwhile, mix the salt, black pepper, and flour in a bowl, then chop the garlic and parsley.

Heat 5 tablespoons of butter in a frying pan large enough to hold all the frog legs. If you don't have a pan large enough, put a baking sheet in the oven and set a rack inside. Turn the oven to about 180°F. You'll use this to store the finished frog legs while you fry the rest. If you do have a large enough pan, set the baking sheet—with the rack set inside—next to the stove top.

Dredge the frog legs in the seasoned flour and shake off the excess. Fry in butter over medium-high heat until golden, about 3 to 5 minutes per side. Flip only once if you can help it, as the flour coating is fragile. Set on the rack to drain when the frog legs are done.

Discard the butter in the pan and wipe it out with a paper towel. Set the pan back on the stove over medium-high heat. When the butter is hot, sauté the garlic until it smells good, about 1 minute. Turn off the heat and swirl in the lemon juice. Arrange the frog legs on individual plates, and, right before you serve, mix the parsley into the sauce. Pour it over the frog legs and serve immediately.

Bon appétit!