Reading 5.2 – Big News in Eugene

The Eugene City Guard

Notice the date!

June 20th 1934

Frogs to help in the food crisis!

Yes, this is a real article from the newspaper in 1934!

Earlier this year, the city started releasing Bull Frogs to the Eugene area in an attempt to curb the growing food crisis the city is facing. Bull frogs have been found to thrive in our climate and increase in population quickly. The hope is that these frogs will provide food for the hundreds of families that go hungry every day here in our city.

One city official put it this way. "These frogs are huge. There is a lot of meat on these things. Not to mention they grow quickly and multiply real quick." He said that the hope is that the frogs will be all over the place and easy to find and catch.

These large frogs have a lot of meat on their large rear legs and should provide food for families for many years to come! Please send your recipes to the Guard and we will publish the best one each week. The French love frog legs, so Bon appétit!

When Bull Frogs were introduced in Eugene, the intent was to help people find much needed food. What do you think would happen if a new organism that is large and reproduces quickly suddenly came into an ecosystem? What things might it affect?

Lesson 6 – Why should we care about an invader?

Reading 6.1

~~Activity 6.1~~ – There's no bull about this frog!

What will we do?

We will learn more about the American Bull frog and try to determine if it could have an impact on the Turtle population.

In each numbered section, highlight things that would help the bullfrog species be successful and survive.

1

The American bullfrog (*Rana catesbeiana*) is native to eastern United States. They were introduced to the west coast during the Great Depression (1930s) to provide opportunities for frog hunting and food (i.e. frog legs), and due to their ability to tolerate and adapt to heavily disturbed environments, they have successfully invaded our local wetlands and have likely had a major impact on local wetland species.

Environment

2

Bullfrogs can live together in high density and outcompete native species for habitat and food. They can live in both natural and man-made lakes, ponds, wetlands, and reservoirs. They primarily live near the shoreline and can tolerate high levels of pollution, warmth, and turbidity (the murkiness of the water).

Food

3

Bullfrogs have many physical adaptations that allow them to eat almost anything that crosses their path. They have a very large mouth with a projectile tongue that allows them to eat spiders, scorpions, rodents, snakes, fish, and even each other! They also have very large hind legs that allow them to jump up three feet, swim up to 20 feet to shore, and hop about 15 to 20 feet on land.

Reproduction

4

Bullfrogs grow to be on average 8 inches and live 10 years. It takes them two years to go from eggs to adult frogs. As an adult, they can lay 6000-25,000 eggs per year.

Other Organisms

5

Many other organisms are affected by the American bullfrog. They can outcompete native species for habitat and food, and they prey on almost anything in their habitat. They are carriers of diseases such as the chytrid fungus which will decimate other amphibious populations. They are also considered a public nuisance because their *baROOM* mating call can be 80 decibels, equivalent to a vacuum cleaner and may cause permanent hearing damage to humans. They have very few predators.

Analysis and Interpretation

Do you think the Bull Frog is causing the population change in Western Pond Turtles? Support your ideas with evidence from the reading.