

# Nebraska's Zebra Mussel Status

Offutt Air force Base Lake was treated with **copper sulfate in 2008 and 2009 to kill the zebra mussel infestation in the lake**

- **New infestation found in 2014**
- No motor boats are allowed on the lake

## South Dakota Mussel Infestations which Threaten Nebraska:

Quagga Mussels were found in Angostoria in South Dakota which is 90 miles north of Box Butte reservoir in Nebraska in 2014

A single zebra mussel was found on a dock on Lewis and Clark on the SD side in 2014

- Zebra Mussels were eradicated from **Lake Zorinsky in 2010** by drawing down the lake and then it was refilled in 2011 & **reopened in 2012.**

Yearly testing for zebra mussel larvae and adults has been **negative since that time**

**Zebra and Quagga Mussel Sightings Distribution**  
*Dreissena polymorpha* and *D. rostriformis bugensis*



- Zebra mussel occurrences
- Quagga mussel occurrences
- Both species occurrences
- Zebra/Quagga mussels eradicated
- Zebra/Quagga mussels failed

# Offutt AFB Lake Zebra Mussel Infestation

- Infestation was verified in May 2014
- Due to density of adult stage mussels it is likely zebra mussels returned to the lake 4 years ago.
  - It generally takes 4 years to see high densities of mussels in shallow areas



113-acre lake and a 70-acre park  
It is used mainly as an RV camping area with fishing.



# Offutt Air Force Base Lake (Bellevue, NE)

• June 6, 2014

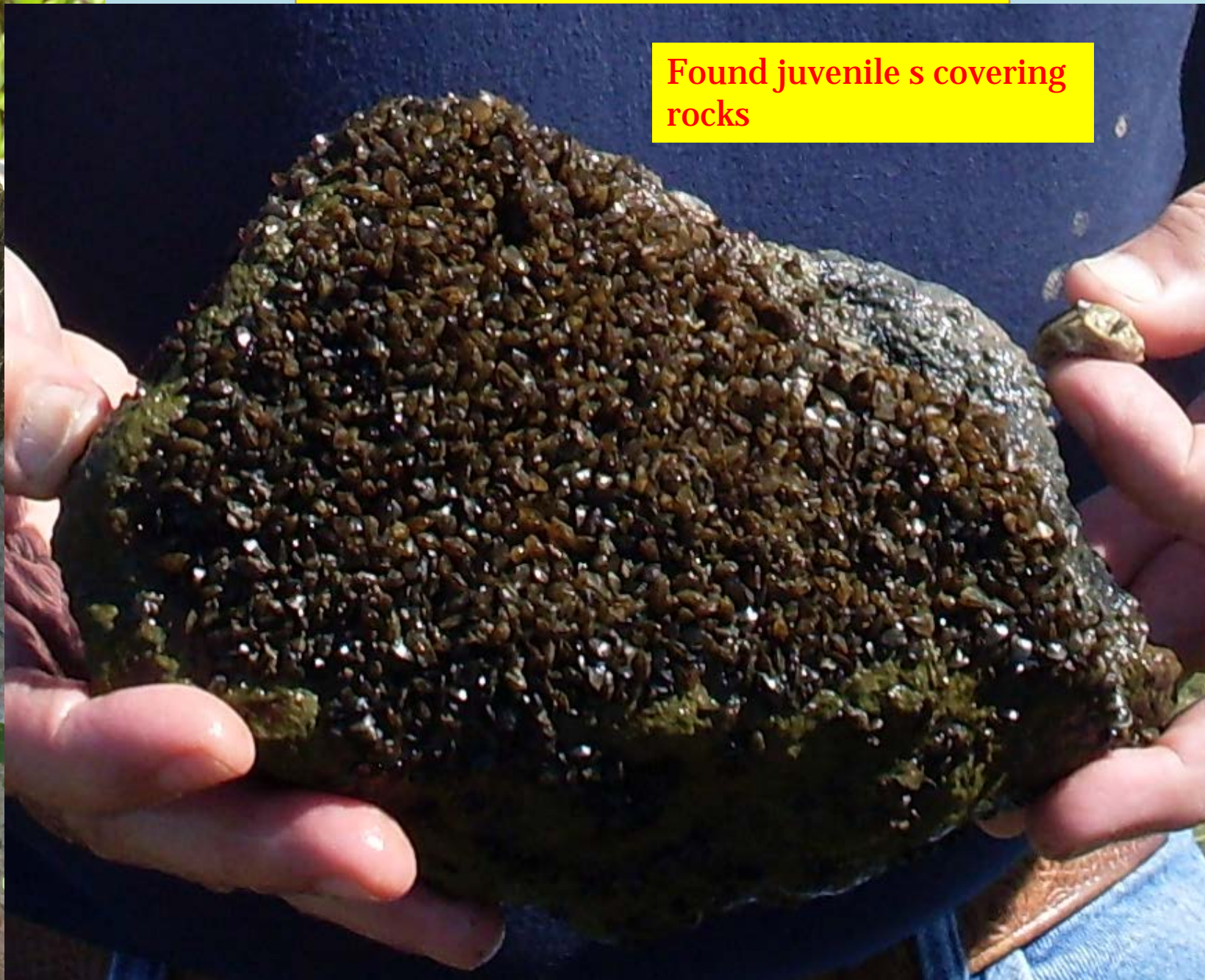
Rocks  
contained  
1-7 adult  
mussels



July 30, 2014



Found juvenile s covering rocks



**September 26, 2014**

**Found far less zebra mussels than in July and August. They had grown to adult size.**



# Advisory Council Recommendations to Offutt Staff

## Remove concrete and asphalt from the lake

- Substrate is needed by zebra mussels this would reduce habitat for them

## Introduce fish which have been shown to feed on zebra mussels

- 200 red eared sunfish (2 inches in size)
- 5,000 Blue Catfish (10 inches)

**Increase signage** clean, drain dry and not dumping bait water



# Zebra & Quagga Mussel control options

- Clean, Drain and Dry prevention & Education
- Only 2 cases of irradiation of mussels in the US
  - In the 1980s use of Pot Ash in a small lake in Virginia (close to \$1 million)
  - Lake Zorinsky in Omaha, NE-USACE lake with a fall out structure to drawn down 17 feet
- Zequinox-\$400,000 to treat Christmas lake, MN
  - Requires treatment every couple of years due to 90% kill rate
  - So far is used in concentrated testing environment
  - Not sure costs or feasibility of use in a large lake system

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