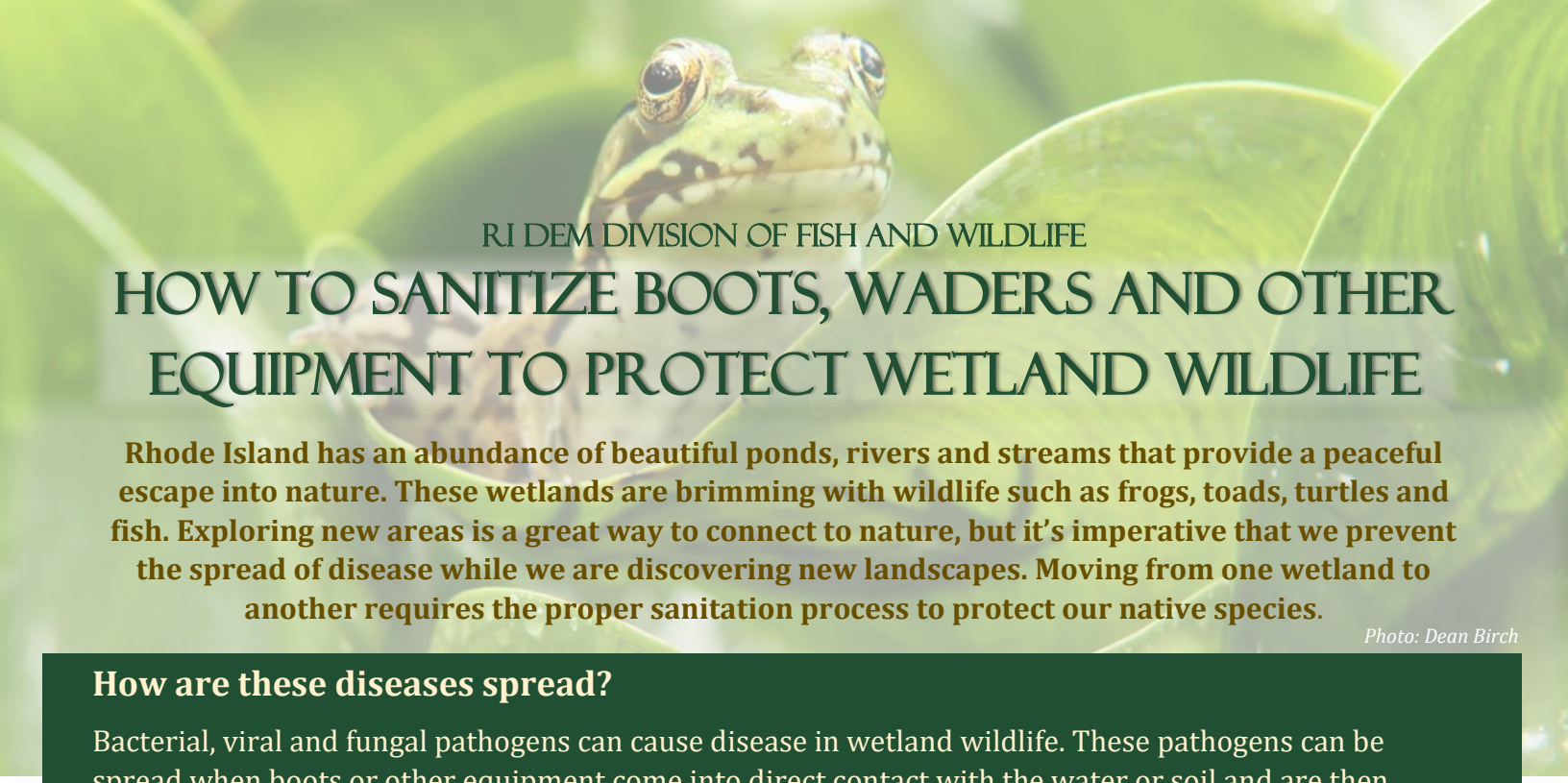

R.I DEM DIVISION OF FISH AND WILDLIFE

HOW TO SANITIZE BOOTS, WADERS AND OTHER EQUIPMENT TO PROTECT WETLAND WILDLIFE

Rhode Island has an abundance of beautiful ponds, rivers and streams that provide a peaceful escape into nature. These wetlands are brimming with wildlife such as frogs, toads, turtles and fish. Exploring new areas is a great way to connect to nature, but it's imperative that we prevent the spread of disease while we are discovering new landscapes. Moving from one wetland to another requires the proper sanitation process to protect our native species.

Photo: Dean Birch

How are these diseases spread?

Bacterial, viral and fungal pathogens can cause disease in wetland wildlife. These pathogens can be spread when boots or other equipment come into direct contact with the water or soil and are then brought to another wetland. Walking or paddling through an infected area has the potential to spread the disease to an uninfected area.

What equipment should be sanitized?

Boots, waders, kayaks, canoes, paddles, nets, buckets, and any other item that has come into contact with the water.

When should I sanitize?

Sanitize after each visit to a wetland (pond, stream, swamp etc.) and before moving from one wetland to another that is out of short walking distance.

What will I need?

- A Bucket of Soapy Water
- A Scrub Brush
- 3% Bleach Solution* in a Spray Bottle [1:32 dilution (bleach:water)]
- A Hose or Gallon of Water

What are the steps?

1. Remove all debris (mud, plants etc.) with hose and/or scrub brush
2. Wash with soapy water
3. Rinse with water
4. Spray thoroughly with diluted bleach including the bottoms of boots/waders**
5. Wait 5 minutes
6. Rinse with water

Thank you for helping conserve Rhode Island's wetland wildlife.

*Bleach solution only remains effective for 1 week

**If sanitizing your equipment onsite, be sure you are at least 50 meters from any natural water source.

DISEASES AFFECTING WETLAND WILDLIFE

CHYTRIDIOMYCOSIS is an infectious disease caused by the Chytrid Fungus (*Batrachochytrium dendrobatidis*) that has devastated amphibian populations world-wide. The Chytrid fungus causes thickening of the normally permeable skin, disrupting an amphibian's ability to absorb water and breathe. This disease has caused declines in over 500 frog and salamander species. This fungus does not affect humans.

SYMPTOMS: Amphibians infected with this fungus may be lethargic, swim in circles, sit with legs outstretched or bask in hot temperatures, when healthy amphibians are hiding. Mass die-offs caused by Chytrid fungus have been observed around the world.

For more information visit: https://www.northeastwildlife.org/disease/chytridiomycosis

RANAVIRUS, or Large Mouth Bass Virus, is an infectious disease affecting reptiles, amphibians and fish with a 90-100% mortality rate. There are several different kinds of Ranavirus that impact species at different levels. This disease is believed to be responsible for many recent massive mortality events around the world and unchecked could eliminate entire species.

SYMPTOMS: Amphibians infected with Ranavirus may display weak or erratic swimming, hemorrhaging in the skin, especially by the hind legs and vent, gaping for air and lethargy. Reptiles, specifically turtles, will display weakness, have swollen eyelids, ulcers on their feet, and discharge from the nose and mouth. Fish infected with Rananvirus may display hyper-buoyancy, spiral swimming and lethargy, which are attributed to damage to the swim bladder. *This disease cannot be transmitted to humans, but all freshwater fish should be thoroughly cooked before eating.*

For more information visit: https://www.northeastwildlife.org/disease/ranavirus

Please report any suspected infections of Chytrid Fungus or Ranavirus, such as large numbers of dead amphibians or fish, to:

RI DEM Fish & Wildlife (401) 789-0281