CATT EQUIPMENT CLEANING PROTOCOL
-- MINIMIZING RISK FROM AQUATIC INVASIVES --

Protection from: whirling disease, New Zealand mudsnails, chytrid fungus, zebra/quagga mussels, didymo, Eurasian milfoil, and other invasives

Reference: Preventing the spread of aquatic invasive organisms common to the intermountain region: Guidance for 2011 fire activities.

- Inspect and clean equipment that comes in contact with water, including:
  - Waders
  - Wading boots
  - Wading socks
  - Wading rods
  - Tape measures
  - Thermometers
  - Water filters
  - ectrofishing probes
  - Buckets
  - Electrofishing gloves
  - Nets (dip, block, kick seines, etc.)
  - Wet suits
  - Neoprene gloves
  - Masks and snorkels
  - Trucks

- **In Field:**
  - remove vegetation and mud at the sample site, as practical
  - use high pressure hose at carwash to rinse waders, boots, nets
  - run truck thru automatic carwash (be sure to include the underbody wash)

- **At Lab (disinfecting solution):**
  - PPE: rubber gloves, splash goggles
  - do NOT soak water filters, masks, snorkels in disinfecting solution
  - mix disinfecting solution:

| Tap water | Vol. Sparquat 256 (3%) | | | Vol. Green Solutions High Dilution256 (1.8%) | | |
|---|---|---|---|---|---|---|
| | liters | fl oz | cups | liters | fl oz | cups |
| 1 gallon | 0.12 | 4.1 | 0.5 | 0.07 | 2.5 | 0.3 |
| 5 gallons | 0.6 | 20.5 | 2.5 | 0.4 | 12.5 | 1.5 |
| 10 gallons | 1.2 | 41 | 5.0 | 0.7 | 25.0 | 3.0 |
| *solution can be used repeatedly for 1 week unless heavily muddied or diluted* | | | | | | |

  - scrub with stiff brush to remove mud and other debris
  - soak in disinfecting solution for at least 10 minutes
  - rinse thoroughly
    - use high pressure sprayer if available
    - do not rinse water down storm drains or into waterways
  - hang to dry as long as possible before use
    - hang wading boots so felt is not touching ground

- **At Lab (drying):**
  - When a couple weeks of time is available between equipment use, thorough drying is an effective sanitizing method
  - Once an item is completely dry, it must remain dry for 5 days (in sunlight is best)
  - see Methods of Control Table in 2011 Technical Guidelines for details

**Testing Disinfectant Concentration**

When a large volume of quat solution is used repeatedly and has possibly become diluted, the solution can lose its effectiveness. To determine if solution strength is effective:

- Add 1/4 cup (2 oz) of the Sparquat or  solution to 1 gallon of water. Mix.
- Test the diluted solution with “Quat Chek 1000” Test Paper.
- Match up the color of the paper with the ppm’s on the color chart.
- For optimal disinfection, the diluted solution should have a concentration of between 400 and 600 ppm.

**Supply Sources**

For chemical and test strip supply sources see the R4 Aquatic Invasive Species website and the 2011 Operational Guidelines.