

Water-bird Rehabilitation

How We Survived Being Sucked into the Polar Vortex

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Frozen



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Birds presented with...

- * Hypothermia
- * Dehydration
- * Starvation
- * Grounding- or collision-related injuries



Major Challenges...

- * Shortage of incubator space for critical care birds
- * Substrate: avoiding pressure sores in critical care birds
- * Protecting waterproofing for critical care birds
- * Shortage of swimming and feeding facilities for stable birds
- * Strain on available solid food supply (smelt)
- * Couldn't release rehabilitated birds due to lack of open water



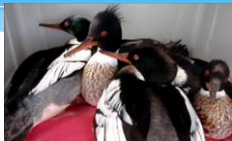
Hospital space...



- Stainless cages
- Thick, ravel-free sheets and towels as substrate (LOTS of laundry!)
- Ziploc "water beds"
- Group housing for compatible birds
- Clip lamps for warmth
- Birds temporarily marked with colored cable-tie leg bands
- Later: Swim pans in cages (keep water clean!)

Recovery areas...

- * Group housing for compatible birds
- * Group swim for compatible birds
- * Swim tubs for release prep
- * Astroturf substrate



Feeding

- Address dehydration first
- Protect against "refeeding syndrome"
- Determine wild diet
- Protect bird from feather soiling caused by FOOD
- Be prepared to find alternate food sources
- Thiamine (Vitamin B1) supplementation for fish diets



Diver Tubs



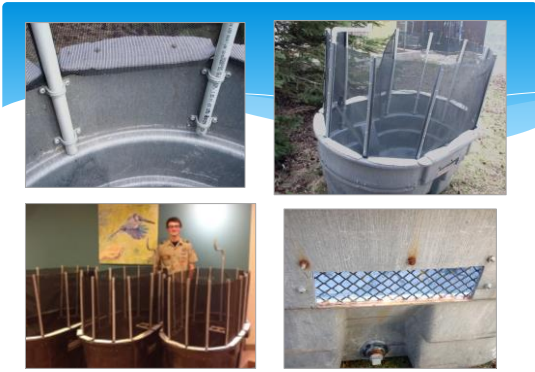
Diver Tubs



Get birds onto water as soon as possible: thermally stable, WATERPROOF, strong enough.

Continuous fresh water flow with surface run-off.







Diver Tubs: materials

- * 100 gallon plastic stock tank
- * "Dog-proof" window screening
- * Plastic electrical conduit
- * Plastic mesh overflow screen
- * "Coroplast" filler pieces in gaps around screen barrier
- * Nuts and bolts; screws
- * Grommets; bungee cords



Waterproofing



Waterproofing

- * **Feathers and Waterproofing: Physical and Behavioral Aspects**, Kurt Klumpner, International Bird Rescue Research Center, Albany, NY 2011 (PowerPoint at NWRA Conference, 2011)
- * **Birds, Feathers and Waterproofing** (same author, NWRA Conference handout)
- * **An Introduction to Aquatic Bird Rehabilitation**, Bill, January O., Corsiglia, Masvidal, Merrick, Riggs. Bird Ally X, Arcata, CA 2012. (Available through NWRA)

Bird Washing to Restore Waterproofing

- "Key requirements for this method of cleaning are:*
- A large amount of warm water at ~100-104° F (39-40°C) preferably in the range of 2-5 grains of hardness;
 - A detergent solution that is effective in breaking down the contaminant and is safe for use by people and birds;
 - Sufficient water pressure to rinse away the cleaning solution in a timely manner.
 - Usually, liquid dishwashing detergents are an effective, safe, and easily obtainable solution.
 - Birds are cleaned in a weak detergent solution (0.5-2% Dawn) at 102-104 °F (39-40° C).
 - Rinsing is achieved by using a high pressure nozzle (40 psi) and thoroughly rinsing every area until feathers are fluffed out to the skin and repelling water.
 - The nozzle pressure should be significantly reduced while rinsing around the eyes, and ears."
- From "Birds, Feathers and Waterproofing," Kurt Klumpner*

Bird Washing to Restore Waterproofing

- * Use blow-dryer or heat lamps to completely dry bird and let them preen before allowing back in water. **MAKE SURE THE BIRD DOES NOT OVERHEAT!**
- * Over the next couple of days check to make sure the bird is **truly waterproof**. Rewash if needed.



RELEASE!

- * Waterproof/intact feathers
- * Good body weight (see [Body Weights](#) of 686 Species of North American Birds by John Dunning, IWRC)
- * Normal PCV and TS/TP
- * Recovered from other injuries
- * Large areas of open water available
- * Appropriate location, reasonable protection from predation
- * Demonstrates normal behaviors for the species (swims, dives, flaps strongly, preens, etc.)



Questions?