

HACCP Step 1 – Activity Description

Activity Description	
Facility: Iron River National Fish Hatchery	Site: Iron River National Fish Hatchery
Project Coordinator: Kurt Schilling	Activity: Spawning wild lake trout and coaster brook trout for brood stock
Site Manager: Dale Bast	
Address: 10325 Fairview Rd Iron River, WI 54847	
Phone: 715-372-8510	

Project Description i.e. Who; What; Where; When; How; Why
<p>Iron River National Fish Hatchery periodically spawns wild lake trout and coaster brook trout in the Great Lakes and Great Lakes tributaries. Spawning wild fish and collecting the eggs maintains and enhances the genetic diversity of the captive hatchery brood stock used for production fish.</p>

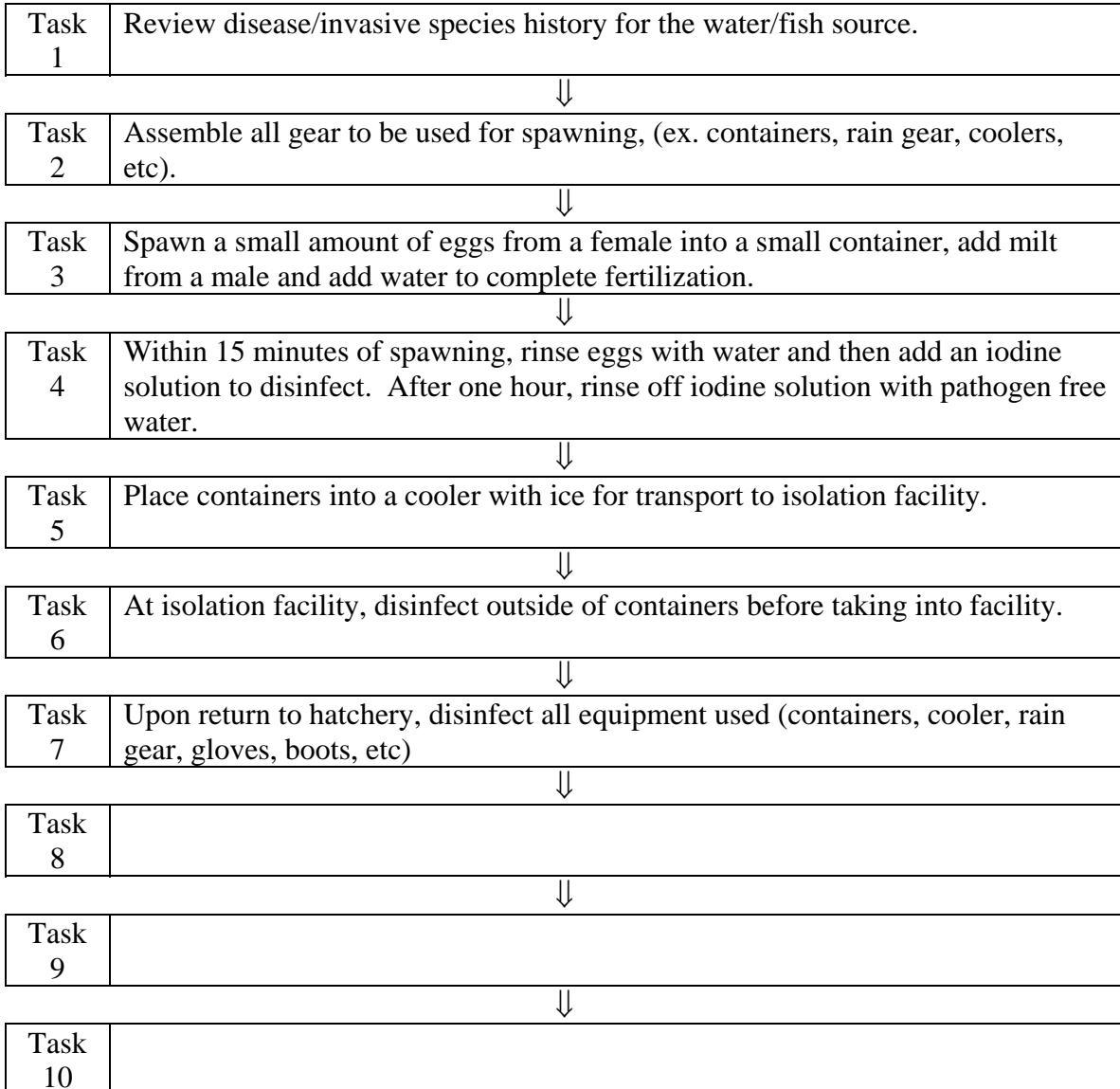
HACCP Step 2 – Identify Potential Hazards

(to be transferred to column 2 of HACCP Step 4 – Hazard Analysis Worksheet)

Hazards: Species Which May Potentially Be Moved/Introduced
Vertebrates: Round Goby, Ruffe
Invertebrates: New Zealand Mudsnaills, <i>Potamopyrgus antipodarum</i> , are located within 40 miles in St. Louis Bay of Lake Superior; Spiny Water Flea, Zebra Mussels
Plants: Eurasian Water Milfoil, Purple Loosestrife, etc
Other Biologics (e.g. disease, pathogen, parasite): Includes all fish diseases, pathogens and parasites not present in hatchery water supply. Currently no detectable fish pathogens present in hatchery water supply.
Others (e.g. construction materials, etc.):

HACCP Step 3 – Flow Diagram

Flow Diagram Outlining Sequential Tasks to Complete Activity/Project
Described in HACCP Step 1 – Activity Description
(to be transferred to column 1 of the HACCP Step 4 – Hazard Analysis Worksheet)



HACCP Step 4 - Hazard Analysis Worksheet

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point? (yes/no)
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Task 1 Review disease/invasive species history for the water/fish source.	Vertebrates	No			yes
	Invertebrates	No			
	Plants	No			
	Others	No			

Task 2 Assemble all gear to be used for spawning, (ex. containers, rain gear, coolers, etc).	Vertebrates	No			No
	Invertebrates	No			
	Plants	No			
	Others	No			

HACCP Step 4 - Hazard Analysis Worksheet

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point? (yes/no)
Task 3 Spawn a small amount of eggs from a female into a small container, add milt from a male and add water to complete fertilization.	Vertebrates	Yes	Fish diseases and invasive species are inherent in wild populations of fish	Fish will be externally inspected for signs of disease	Yes
	Invertebrates	Yes			
	Plants	Yes			
	Others	Yes			
Task 4 Rinse eggs with water and then add an iodine solution to disinfect. After one hour, rinse off iodine solution with pathogen free water.	Vertebrates	Yes	Diseases are possibly present in lake water	Eggs are disinfected 75 ppm iodine solution	Yes
	Invertebrates	Yes			
	Plants	Yes			
	Others	Yes			

Hazard Analysis Worksheet (continued)

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point? (yes/no)
Task 5 Place containers into a cooler with ice for transport.	Vertebrates	Yes	Possible contamination of outside of containers or cooler.	Control measures will be addressed in task 6.	No
	Invertebrates	Yes			
	Plants	Yes			
	Others	Yes			
Task 6 At isolation facility, disinfect outside of containers before taking into facility	Vertebrates	Yes	Possible transmission of disease from the outside of containers	Disinfect outside of all containers with 100 ppm iodine for 10 minutes before transport into facility	Yes
	Invertebrates	Yes			
	Plants	Yes			
	Others	Yes			

Hazard Analysis Worksheet (continued)

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point? (yes/no)
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Task 7 Upon return to hatchery, disinfect all equipment used (containers, cooler, rain gear, gloves, boots, etc)	Vertebrates	Yes	Diseases possible from lake water as well as from other facility	Complete disinfection of all equipment using Sanaqua (290 ppm) for 10 minutes.	Yes
	Invertebrates	Yes			
	Plants	Yes			
	Others	Yes			

HACCP Step 5 – HACCP Plan Form

HACCP Plan Form								
(all CCP's or "yes's" from column 6 of HACCP Step 4 – Hazard Analysis Worksheet)								
Critical Control Point (CCP)	Significant Hazard(s)	Limits for each Control Measure	Monitoring				Evaluation & Corrective Action(s) (if needed)	Supporting Documentation (if any)
			What	How	Frequency	Who		
T-1: Review disease/invasive species history for the water/fish source.	Other	Disease free waters, if not, see evaluation and corrective actions.	Prevent introduction of disease/invasive species.	Review APHIS disease and federal/state wild fish health survey	Before the activity is planned.	Staff	If new diseases/ invasive species discovered, decision can be made to not go into the wild at that time to get new gametes.	Wild spawning SOP
T-3: Spawn wild fish	Other	No visible signs of disease or invasives.	Reduce disease incidence	Do not use visibly sick fish	Every fish spawned	Staff	Production supervisor	
T-4: Rinse and disinfect eggs	Other		Reduce disease incidence	Disinfect with iodine solution	Each container of eggs	Staff	Production supervisor	
T-6: Transfer eggs to isolation facility	Other	100% disinfection of containers	Reduce disease contamination	Disinfect outside of containers	All items transported into facility	Staff	Production supervisor	
T-7: Equipment returned to station	Other	100% disinfection of equipment	Reduce disease contamination	Disinfect all equipment used	Upon return to station	Staff	Production supervisor	
Facility: Iron River National Fish Hatchery				Activity: Spawning wild lake trout and coaster brook trout				
Address: 10325 Fairview Rd Iron River, WI 54847								
Signature:				Date:				
HACCP Plan was followed.								