

HACCP Plan

HACCP Step 1 - Activity Description	
Facility: Iowa Department of Natural Resources	Site: Statewide
Project Coordinator: Jason Euchner	Project Description: Electroshocking on rivers & lakes
Site Manager: Fisheries biologist & technician	
Address: 1436 255th St Boone, IA 50036	
Phone: 515-432-2823	

Project Description (Who, What, Where, When, How & Why)
Who: Fisheries management and research biologists & technicians. What: Boat electroshocking When: Spring thru fall Where: Statewide rivers and lakes How: Electroshocking boat Why: To sample fish populations, collect fish, or tag fish.

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HACCP Step 2 - Potential Hazard Identification

Vertebrates:

Non native fish species (Asian carp, White perch, Round Goby, Ruffe)

Invertebrates:

Zebra Mussel, Quagga mussel, Rusty crawfish, Spiny water flea, New Zealand mudsnail

Plants:

Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad

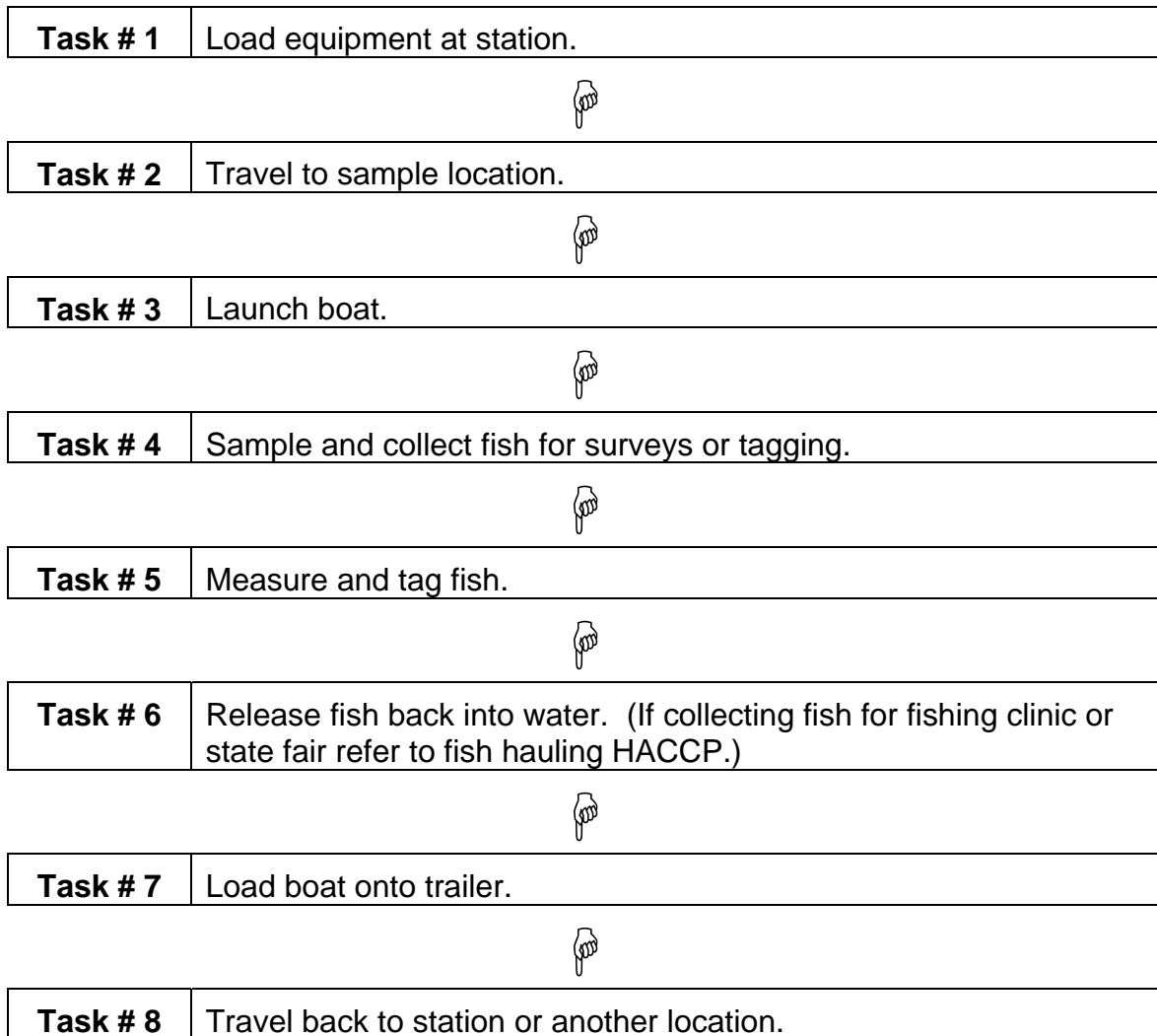
Other Biologics:

Largemouth bass virus (LMBV), Viral hemorrhagic septicemia (VHS)

Others:

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HACCP Step 3 - Flow Diagram



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HACCP Step 4 - Hazard Analysis

Task	Hazard	Probable?	Justification	Control Measures	CCP?
Load equipment at station.	Vertebrate: Non native fish species (Asian carp, White perch, Round Goby, Ruffe)	No	Equipment should be clean.		No
	Invertebrate: Zebra Mussel, Quagga mussel, Rusty crawfish, Spiny water flea, New Zealand mudsnail	No	Equipment should be clean.		No
	Plant: Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad	No	Equipment should be clean.		No
	Other Biologic: Largemouth bass virus (LMBV), Viral hemorrhagic septicemia (VHS)	No	Equipment should be clean.		No
Travel to sample location.	Vertebrate: Non native fish species (Asian carp, White perch, Round Goby, Ruffe)	No	Equipment should be clean.		No
	Invertebrate: Zebra Mussel, Quagga mussel, Rusty crawfish, Spiny water flea, New Zealand mudsnail	No	Equipment should be clean.		No
	Plant: Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad	No	Equipment should be clean.		No
	Other Biologic: Largemouth	No	Equipment should		No

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	bass virus (LMBV), Viral hemorrhagic septicema (VHS)		be clean.		
Launch boat.	Vertebrate: Non native fish species (Asian carp, White perch, Round Goby, Ruffe)	No	Equipment should be clean.		No
	Invertebrate: Zebra Mussel, Quagga mussel, Rusty crawfish, Spiny water flea, New Zealand mudsnail	No	Equipment should be clean.		No
	Plant: Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad	No	Equipment should be clean.		No
	Other Biologic: Largemouth bass virus (LMBV), Viral hemorrhagic septicema (VHS)	No	Equipment should be clean.		No
Sample and collect fish for surveys or tagging.	Vertebrate: Non native fish species (Asian carp, White perch, Round Goby, Ruffe)	No	Sampling and collecting fish, not moving to another system.		No
	Invertebrate: Zebra Mussel, Quagga mussel, Rusty crawfish, Spiny water flea, New Zealand mudsnail	No	Sampling and collecting fish, not moving to another system.		No
	Plant: Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad	No	Sampling and collecting fish, not moving to another		No

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			system.		
	Other Biologic: Largemouth bass virus (LMBV), Viral hemorrhagic septicemia (VHS)	No	Sampling and collecting fish, not moving to another system.		No
Measure and tag fish.	Vertebrate: Non native fish species (Asian carp, White perch, Round Goby, Ruffe)	No	Measuring and tagging fish, not moving to another system.		No
	Invertebrate: Zebra Mussel, Quagga mussel, Rusty crawfish, Spiny water flea, New Zealand mudsnail	No	Measuring and tagging fish, not moving to another system.		No
	Plant: Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad	No	Measuring and tagging fish, not moving to another system.		No
	Other Biologic: Largemouth bass virus (LMBV), Viral hemorrhagic septicemia (VHS)	No	Measuring and tagging fish, not moving to another system.		No
Release fish back into water. (If collecting fish for fishing clinic or state fair refer to fish hauling HACCP.)	Vertebrate: Non native fish species (Asian carp, White perch, Round Goby, Ruffe)	No	Will not release non native species back into system.		No
	Invertebrate: Zebra Mussel, Quagga mussel, Rusty crawfish, Spiny water flea, New Zealand mudsnail	No	Will not release non native species back into system.		No

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	Plant: Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad	No	Will not release non native species back into system.		No
	Other Biologic: Largemouth bass virus (LMBV), Viral hemorrhagic septicemia (VHS)	No	Will not release non native species back into system.		No
Load boat onto trailer.	Vertebrate: Non native fish species (Asian carp, White perch, Round Goby, Ruffe)	Yes	Possible to have in or on boat.	Drain fish tanks, and bilge of boat and inspect for presence of standing water.	Yes
	Invertebrate: Zebra Mussel, Quagga mussel, Rusty crawfish, Spiny water flea, New Zealand mudsnail	Yes	Possible to have in or on boat.	Drain fish tanks, and bilge of boat and inspect for presence of standing water.	Yes
	Plant: Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad	Yes	Possible to be on boat or trailer.	Inspect and remove any plant fragments before leaving ramp.	Yes
	Other Biologic: Largemouth bass virus (LMBV), Viral hemorrhagic septicemia (VHS)	Yes	Possible to have in or on boat.	Drain fish tanks, and bilge of boat and inspect for presence of standing water.	Yes
Travel back to station or another	Vertebrate: Non native fish species (Asian carp, White	No	Equipment should be clean.		No

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location.	perch, Round Goby, Ruffe)				
	Invertebrate: Zebra Mussel, Quagga mussel, Rusty crawfish, Spiny water flea, New Zealand mudsnail	No	Equipment should be clean.		No
	Plant: Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad	No	Equipment should be clean.		No
	Other Biologic: Largemouth bass virus (LMBV), Viral hemorrhagic septicemia (VHS)	No	Equipment should be clean.		No

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HACCP Step 5 - HACCP Plan

Critical Control Point #3:

Task # 7: Load boat onto trailer.

Significant Hazards:

Vertebrate: Non native fish species (Asian carp, White perch, Round Goby, Ruffe)

Control Measures:

Drain fish tanks, and bilge of boat and inspect for presence of standing water.

Limits for Control Measures:

If in known infested location pressure wash boat and allow too dry.

Monitoring: What?

Presence of standing water

Monitoring: How?

Visual

Monitoring: Frequency?

Once

Monitoring: Who?

Crew

Evaluation & Corrective Actions:

If water still standing in boat move to a location that allows water to drain from boat.

Supporting Documentation:

Critical Control Point #4:

Task # 7: Load boat onto trailer.

Significant Hazards:

Invertebrate: Zebra Mussel, Quagga mussel, Rusty crawfish, Spiny water flea, New Zealand mudsnail

Control Measures:

Drain fish tanks, and bilge of boat and inspect for presence of standing water.

Limits for Control Measures:

If in known infested location pressure wash boat and allow too dry.

Monitoring: What?

Presence of standing water

Monitoring: How?

Visual

Monitoring: Frequency?

Once

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Monitoring: Who? Crew
Evaluation & Corrective Actions: If water still standing in boat move to a location that allows water to drain from boat.
Supporting Documentation: <div style="background-color: #333; height: 20px; width: 100%;"></div>
Critical Control Point #5: Task # 7: Load boat onto trailer.
Significant Hazards: Plant: Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad
Control Measures: Inspect and remove any plant fragments before leaving ramp.
Limits for Control Measures: Don't leave ramp until all plant fragments are removed from boat and trailer.
Monitoring: What? Plant fragments
Monitoring: How? Visual
Monitoring: Frequency? Once
Monitoring: Who? Crew
Evaluation & Corrective Actions: If in known infested location pressure wash boat and equipment before traveling to another location.
Supporting Documentation: <div style="background-color: #333; height: 20px; width: 100%;"></div>
Critical Control Point #6: Task # 7: Load boat onto trailer.
Significant Hazards: Other Biologic: Largemouth bass virus (LMBV), Viral hemorrhagic septicemia (VHS)
Control Measures: Drain fish tanks, and bilge of boat and inspect for presence of standing water.
Limits for Control Measures: If in known infested location pressure wash boat and allow too dry.
Monitoring: What? Presence of standing water.
Monitoring: How?

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Visual	
Monitoring: Frequency? Once	
Monitoring: Who? Crew	
Evaluation & Corrective Actions: If water still standing in boat move to a location that allows water to drain from boat.	
Supporting Documentation:	
Facility: Iowa Department of Natural Resources	Activity: Electroshocking on rivers & lakes
Address: 1436 255th St Boone, IA 50036	
Signature:	Date:

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HACCP Checklist: Electroshocking on rivers & lakes

Facility Iowa Department of Natural Resources
Site Statewide
Coordinator Jason Euchner
Manager Fisheries biologist & technician
Address 1436 255th St, Boone, IA 50036

- Task # 1: Load equipment at station.**
- Task # 2: Travel to sample location.**
- Task # 3: Launch boat.**
- Task # 4: Sample and collect fish for surveys or tagging.**
- Task # 5: Measure and tag fish.**
- Task # 6: Release fish back into water. (If collecting fish for fishing clinic or state fair refer to fish hauling HACCP.)**
- Task # 7: Load boat onto trailer.**

CRITICAL CONTROL POINT

- Hazards were contained
Hazards: Vertebrate: Non native fish species (Asian carp, White perch, Round Goby, Ruffe)
- Control measures were implemented
Control Measures: Drain fish tanks, and bilge of boat and inspect for presence of standing water.
- Control limits were maintained
Control Limits: If in known infested location pressure wash boat and allow too dry.
- Corrective actions were (performed if necessary)
Corrective Actions: If water still standing in boat move to a location that allows water to drain from boat.

- Hazards were contained
Hazards: Invertebrate: Zebra Mussel, Quagga mussel, Rusty

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crawfish, Spiny water flea, New Zealand mudsnail

- Control measures were implemented
Control Measures: Drain fish tanks, and bilge of boat and inspect for presence of standing water.
- Control limits were maintained
Control Limits: If in known infested location pressure wash boat and allow too dry.
- Corrective actions were (performed if necessary)
Corrective Actions: If water still standing in boat move to a location that allows water to drain from boat.

- Hazards were contained
Hazards: Plant: Eurasian watermilfoil, Curly leaf pondweed, Brittle Naiad
- Control measures were implemented
Control Measures: Inspect and remove any plant fragments before leaving ramp.
- Control limits were maintained
Control Limits: Don't leave ramp until all plant fragments are removed from boat and trailer.
- Corrective actions were (performed if necessary)
Corrective Actions: If in known infested location pressure wash boat and equipment before traveling to another location.

- Hazards were contained
Hazards: Other Biologic: Largemouth bass virus (LMBV), Viral hemorrhagic septicemia (VHS)
- Control measures were implemented
Control Measures: Drain fish tanks, and bilge of boat and inspect for presence of standing water.
- Control limits were maintained
Control Limits: If in known infested location pressure wash boat and allow too dry.
- Corrective actions were (performed if necessary)
Corrective Actions: If water still standing in boat move to a location that allows water too drain from boat.

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- Task # 8: Travel back to station or another location.**