



# Planning is HACCP Everything!



Resource management work may be the pathway to unintentionally spread unwanted plants and animals to new locations. Hazard Analysis and Critical Control Points (HACCP) is a strategic planning process developed by the food industry to prevent contamination. HACCP's five linked forms identify critical control points in your pathway, thereby reducing the risk of spreading hitchhiking plants and animals.

## HACCP Plan: Five Simple Forms

### HACCP Step 1: Activity Description

Activity Description	
Facility: Inks Dam National Fish Hatchery	Activity: Channel Catfish Sub-adult Production
Project Coordinator: Robert Lindsey	Site: Channel Catfish Sub-adult Production
Site Manager: Robert Lindsey	
Address: 345 County rd 117 Burnet, TX, 78611	
Phone: 512-795-2474	
Project Description i.e. Who, What, Where, When, How, Why	
Fishery Resource Offices request channel catfish a year before production begins at the Inks Dam National Fish Hatchery. Requests are submitted to the Regional Office for presentation with other production and fishery needs. After review a production and stocking request is provided to the hatchery prior to the fish rearing season.	
The Hatchery Manager and Assistant Manager direct the harvest of broodstock from holding ponds in early March to begin the rearing cycle. Three and four-year-old broodstock are harvested by draining the pond and moved to clean ponds. In May cans are placed in the ponds to allow spawning. In June and July cans are checked for gravies three times a week. Eggs that are collected are moved to the holding house, disinfected with formalin, and placed into hatching trays. Eggs hatch in three to five days and the resulting fry are moved to clean troughs for feed training. On day fourteen the fry are vaccinated for Enteric Septicemia of Catfish and are then stocked into ponds at 40,000 per acre. In August and September ponds are seeded and fish are split into new ponds at approximately 12,000 per acre. Fish are then grown and overwintered at this density until the next spring and summer when stocking begins. These fish are reared for tribal trust responsibilities, cooperative agreements and conservation exchanges.	

### 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: Includes various sunfishes, crappie, gizzard shad, carp, toad, leopard and bullfrog tadpoles, red eared turtles.
Invertebrates: Asian clam, snail, aquatic insects
Plants: star grass, chara, filamentous algae, bristly pond weed
Other Biologics (e.g. disease, pathogen, parasite):
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)

Task	Description
Task 1	Ponds are filled in June
Task 2	Catfish fry are vaccinated for ESC
Task 3	Catfish fry are stocked into ponds at 14 days old
Task 4	Catfish are monitored and fed regularly
Task 5	Water is added to ponds to offset leakage and evaporation
Task 6	Catfish are harvested to raceways approximately 72-96 hours before shipping
Task 7	Catfish are held in raceways
Task 8	Distribution truck is filled and catfish are loaded
Task 9	Catfish are stocked into receiving waters
Task 10	

### 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 1 Ponds are filled in June	Vertebrates: Includes various sunfishes, crappie, gizzard shad, carp Invertebrates: Asian clam, snail, aquatic insects Plants: star grass, chara, filamentous algae, bristly pond weed Others: "	Yes	Water is supplied from Inks Lake and these species are known to occur there	None	No
Task 2 Catfish fry are vaccinated for ESC	Vertebrates: Includes various sunfishes, crappie, gizzard shad, carp Invertebrates: Asian clam, snail, aquatic insects Plants: star grass, chara, filamentous algae, bristly pond weed Others: "	No	No ANS are present at this stage of the rearing cycle	N/A	No
Task 3 Catfish fry are stocked into ponds at 14 days old	Vertebrates: Includes various sunfishes, crappie, gizzard shad, carp Invertebrates: Asian clam, snail, aquatic insects Plants: star grass, chara, filamentous algae, bristly pond weed Others: "	No	No	N/A	No

### 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)	Limit: for each Control Measure	Monitoring			Who	Evaluation & Corrective Action(s) (if needed)	Supporting Documentation (if any)
			What	How	Frequency			
6) Catfish are harvested to raceways	Fish, invertebrates, plants, amphibians, mollusks	Use largest mesh size seine that is practical. Remove any ANS seen during harvest.	Ensure that nets allow escape of ANS, hand pick larger ANS	Equipment preparation and visual alertness during harvest	Before and during harvest	Hatchery employees	Seine with larger mesh net if needed	Pond records verified by hatchery manager
7) Catfish are held in raceways	Fish, invertebrates, plants, amphibians, mollusks	Conduct manual grade, hold fish in high flow raceway, siphon out any ANS, treat with salt and formalin, use well water for raceways	Ensure that all ANS are removed prior to loading	Visual inspection	When fish first placed in raceway, again after 24 & 48 hours, after salt and formalin treatments	Hatchery employees	Hold longer and repeat process	Hatchery manager to view records and ensure that measures are taken
9) Catfish are stocked into receiving waters	Fish, invertebrates, plants, amphibians, mollusks	Representative samples inspected to ensure no ANS are present	Ensure no ANS escaped the previous tasks	Manual inspection	Before unloading fish	FRD fishery biologist	No ANS should be present at this stage and further sorting would jeopardize survival of fish	

Facility: Inks Dam National Fish Hatchery  
Address: 345 County rd 117, Burnet, TX, 78611  
Signature: \_\_\_\_\_  
HACCP Plan was followed

Activity: Channel catfish sub-adult production  
Date: 8-7-03

Everything you need is online: [www.haccp-nrm.org](http://www.haccp-nrm.org)