

# HACCP\_Plan\_SetnetSites\_Oct2007

HACCP Step 1 - Activity Description	
<b>Facility:</b> Kodiak National Wildlife Refuge	<b>Site:</b> Refuge Wide
<b>Project Coordinator:</b> Bill Pyle	<b>Project Description:</b> Commercial Setnet Fishing
<b>Site Manager:</b> Gary Wheeler	
<b>Address:</b> 1390 Buskin River Road Kodiak, AK 99615	
<b>Phone:</b> 907 487-2600	

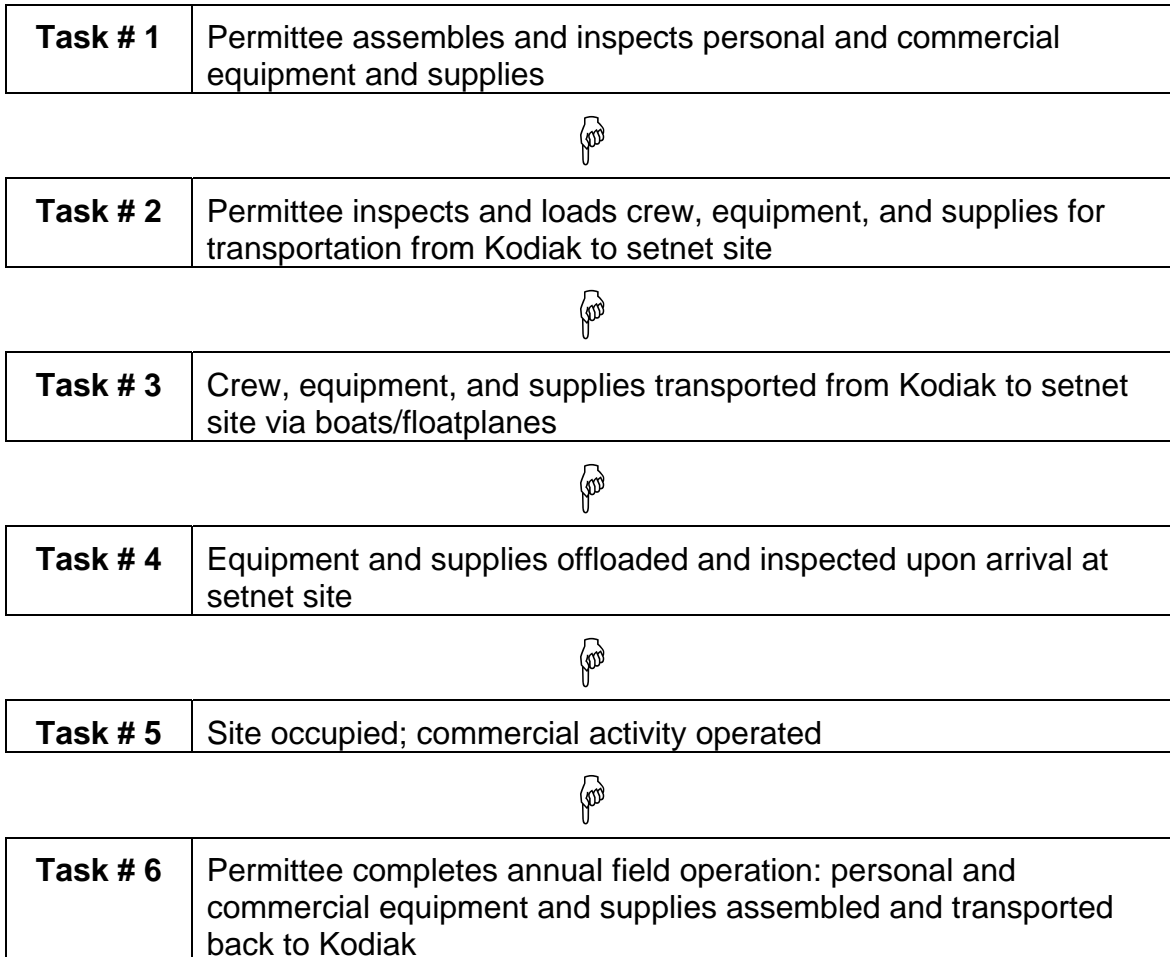
<b>Project Description</b> (Who, What, Where, When, How & Why)
<p>Commercial setnet fishing for salmon is an allowed commercial use of Kodiak NWR. The activity is based in permanent field camps located on the refuge on sites adjacent to the ocean. Setnet operations for each of 26 businesses are re-authorized on an annual basis. Each business is required to re-apply for a Refuge special use permit every year. Re-authorization entails actions by the refuge and the permittee. The permittee applies for a permit and submits an operations plan. The Refuge reviews the application and operations plan and attaches a list of standard (administrative) stipulations that permittees are required to comply with. Permittees sign the permit after completing review and paying an annual fee. Following that, the permit is approved by the Refuge Manager and a copy is provided to the permittee.</p> <p>Most setnet sites were established between the late 1940s-1950s. All of the sites contain small cabins and storage buildings. Most include small garden plots. Businesses involved in setnet fishing typically occupy sites on a seasonal basis from mid to late May to early to mid August. Most are family-run businesses based in Kodiak City. The Refuge's specific concern is the potential for introduction of non-native invasive plants and invertebrates to Refuge lands by setnet businesses when they move personnel, equipment, and supplies from Kodiak to the setnet sites.</p>

# HACCP\_Plan\_SetnetSites\_Oct2007

HACCP Step 2 - Potential Hazard Identification	
<b>Vertebrates:</b>	
<b>Invertebrates:</b>	slugs fleas
<b>Plants:</b>	ornamental plants (e.g., hawkweeds, knotweeds, oxeye daisy, toadflax, etc) berry-producing shrubs (raspberry, blackberry, peashrub, etc.)
<b>Other Biologics:</b>	
<b>Others:</b>	

# HACCP\_Plan\_SetnetSites\_Oct2007

## HACCP Step 3 - Flow Diagram



## HACCP\_Plan\_SetnetSites\_Oct2007

HACCP Step 4 - Hazard Analysis					
Task	Hazard	Probable?	Justification	Control Measures	CCP?
Permittee assembles and inspects personal and commercial equipment and supplies	Invertebrate: slugs	Yes	May occur on equipment and/or plant materials stored outdoors or obtained in Kodiak	Thoroughly inspect equipment and plant materials for slugs; remove and dispose when found	Yes
	Invertebrate: fleas	Yes	May occur on pets transported to setnet site	New flea collar placed on pet at least 1 week before transport of pet from Kodiak	Yes
	Plant: ornamental plants	Yes	Plants procured for shipment to setnet site	Do not procure	Yes
	Plant: berry-producing shrubs	Yes	Shrubs procured for shipment to setnet site	Do not procure	Yes
Permittee inspects and loads crew, equipment, and supplies for transportation from Kodiak to setnet site	Invertebrate: slugs	Yes	May occur on equipment and/or plant materials stored outdoors or obtained in Kodiak	Removal and disposal	No
	Invertebrate: fleas	Yes	May occur on pets transported to setnet site	New flea collar placed on pet at least 1 week before transport of pet from Kodiak	No

## HACCP\_Plan\_SetnetSites\_Oct2007

	Plant: ornamental plants	Yes	Plants procured for shipment to setnet site	Do not procure	No
	Plant: berry-producing shrubs	Yes	Shrubs procured for shipment to setnet site	Do not procure	No
Crew, equipment, and supplies transported from Kodiak to setnet site via boats/floatplanes	Invertebrate: slugs	No	Preventative measures taken prior to transport		No
	Invertebrate: fleas	No	Preventative measures taken prior to transport		No
	Plant: ornamental plants	No	Preventative measures taken prior to transport		No
	Plant: berry-producing shrubs	No	Preventative measures taken prior to transport		No
Equipment and supplies offloaded and inspected upon arrival at setnet site	Invertebrate: slugs	Yes	Slugs that were undetected during initial inspections	Remove, kill, dispose	Yes
	Invertebrate: fleas	Yes	May occur on pets	Replace flea collar; keep pet indoors for most of time	No
	Plant: ornamental plants	Yes	Accidentally procured or inadvertently	Burn in safe burn container/location	No

## HACCP\_Plan\_SetnetSites\_Oct2007

			included		
	Plant: berry-producing shrubs	Yes	Accidentally procured or inadvertently included	Burn in safe burn container/location	No
Site occupied and commercial activity operated	Invertebrate: slugs	No	Preventative measures taken prior to site operation		No
	Invertebrate: fleas	No	Preventative measures taken prior to site operation		No
	Plant: ornamental plants	No	Preventative measures taken prior to site operation		No
	Plant: berry-producing shrubs	No	Preventative measures taken prior to site operation		No
Permittee completes annual field operation: personal and commercial equipment and supplies assembled	Invertebrate: slugs	No	Preventative measures taken prior to site operation		No
	Invertebrate: fleas	No	Preventative measures taken prior to site		No

## HACCP\_Plan\_SetnetSites\_Oct2007

and transported back to Kodiak			operation		
	Plant: ornamental plants	No	Preventative measures taken prior to site operation		No
	Plant: berry-producing shrubs	No	Preventative measures taken prior to site operation		No

# HACCP\_Plan\_SetnetSites\_Oct2007

## HACCP Step 5 - HACCP Plan

### **Critical Control Point #1:**

**Task # 1: Permittee assembles and inspects personal and commercial equipment and supplies**

**Significant Hazards:**

Invertebrate: slugs

**Control Measures:**

Thoroughly inspect equipment and plant materials for slugs; remove and dispose when found

**Limits for Control Measures:**

No evidence of slugs after initial inspection; equipment placed in location where contamination won't occur (asphalt/gravel/cement away from vegetated areas)

**Monitoring: What?**

Slug occurrence

**Monitoring: How?**

Secondary inspection after equipment moved to another location

**Monitoring: Frequency?**

Once

**Monitoring: Who?**

Permittee

**Evaluation & Corrective Actions:**

Move equipment to another location; re-inspect and clean

**Supporting Documentation:** N/A

### **Critical Control Point #2:**

**Task # 1: Permittee assembles and inspects personal and commercial equipment and supplies**

**Significant Hazards:**

Invertebrate: fleas

**Control Measures:**

New flea collar placed on pet at least 1 week before transport of pet from Kodiak

**Limits for Control Measures:**

Collar placed on pet 1 week prior to transport

**Monitoring: What?**

Presence of collar

**Monitoring: How?**

Physical proof; time-dated photo

**Monitoring: Frequency?**

Once

## HACCP\_Plan\_SetnetSites\_Oct2007

<b>Monitoring: Who?</b> Permittee
<b>Evaluation &amp; Corrective Actions:</b> Pet washed in biocide detergent; collar placed on pet after washing. Alternatively, pet left in Kodiak
<b>Supporting Documentation:</b> N/A
<b>Critical Control Point #3:</b> <b>Task # 1: Permittee assembles and inspects personal and commercial equipment and supplies</b>
<b>Significant Hazards:</b> Plant: ornamental plants
<b>Control Measures:</b> Do not procure
<b>Limits for Control Measures:</b> No ornamental plants allowed
<b>Monitoring: What?</b> Gear and supplies
<b>Monitoring: How?</b> Visual inspection
<b>Monitoring: Frequency?</b> Once
<b>Monitoring: Who?</b> Permittee
<b>Evaluation &amp; Corrective Actions:</b> Remove plants
<b>Supporting Documentation:</b> N/A
<b>Critical Control Point #4:</b> <b>Task # 1: Permittee assembles and inspects personal and commercial equipment and supplies</b>
<b>Significant Hazards:</b> Plant: berry-producing shrubs
<b>Control Measures:</b> Do not procure
<b>Limits for Control Measures:</b> No berry-producing shrubs allowed
<b>Monitoring: What?</b> Gear and supplies

## HACCP\_Plan\_SetnetSites\_Oct2007

<b>Monitoring: How?</b> Visual inspection	
<b>Monitoring: Frequency?</b> Once	
<b>Monitoring: Who?</b> Permittee	
<b>Evaluation &amp; Corrective Actions:</b> Remove shrubs	
<b>Supporting Documentation:</b> N/A	
<b>Critical Control Point #5:</b> Task # 4: Equipment and supplies offloaded and inspected upon arrival at setnet site	
<b>Significant Hazards:</b> Invertebrate: slugs	
<b>Control Measures:</b> Remove, kill, dispose	
<b>Limits for Control Measures:</b> Inspection completed immediately upon arrival	
<b>Monitoring: What?</b> Equipment and gear particularly items such as wood pallets	
<b>Monitoring: How?</b> Visual	
<b>Monitoring: Frequency?</b> Once	
<b>Monitoring: Who?</b> Permittee	
<b>Evaluation &amp; Corrective Actions:</b> Inspect as soon as possible	
<b>Supporting Documentation:</b>	
<b>Facility:</b> Kodiak National Wildlife Refuge	<b>Activity:</b> Commercial Setnet Fishing
<b>Address:</b> 1390 Buskin River Road Kodiak, AK 99615	
<b>Signature:</b>	<b>Date:</b>

# HACCP\_Plan\_SetnetSites\_Oct2007

## HACCP Checklist:

### Commercial Setnet Fishing

**Facility** Kodiak National Wildlife Refuge  
**Site** Refuge Wide  
**Coordinator** Bill Pyle  
**Manager** Gary Wheeler  
**Address** 1390 Buskin River Road, Kodiak, AK 99615

**Task # 1: Permittee assembles and inspects personal and commercial equipment and supplies**  
**CRITICAL CONTROL POINT**

- Hazards were contained  
Hazards: Invertebrate: **slugs**
- Control measures were implemented  
Control Measures: Thoroughly inspect equipment and plant materials for slugs; remove and dispose when found
- Control limits were maintained  
Control Limits: No evidence of slugs after initial inspection; equipment placed in location where contamination won't occur
- Corrective actions were (performed if necessary)  
Corrective Actions: Move equipment to another location; re-inspect and clean
  
- Hazards were contained  
Hazards: Invertebrate: **fleas**
- Control measures were implemented  
Control Measures: New flea collar placed on pet at least 1 week before transport of pet from Kodiak
- Control limits were maintained  
Control Limits: Collar placed on pet 1 week prior to transport
- Corrective actions were (performed if necessary)  
Corrective Actions: Pet washed in biocide; collar placed on pet after washing. Alternatively, pet left in Kodiak
  
- Hazards were contained  
Hazards: Plant: **ornamental plants**

## HACCP\_Plan\_SetnetSites\_Oct2007

- Control measures were implemented  
Control Measures: Do not procure
- Control limits were maintained  
Control Limits: No ornamental plants allowed
- Corrective actions were (performed if necessary)  
Corrective Actions: Remove plants
  
- Hazards were contained  
Hazards: Plant: **berry-producing shrubs**
- Control measures were implemented  
Control Measures: Do not procure
- Control limits were maintained  
Control Limits: No berry-producing shrubs allowed
- Corrective actions were (performed if necessary)  
Corrective Actions: Remove shrubs
  
- Task # 2: Permittee inspects and loads crew, equipment, and supplies for transportation from Kodiak to setnet site**
- Task # 3: Crew, equipment, and supplies transported from Kodiak to setnet site via boats/floatplanes**
- Task # 4: Equipment and supplies offloaded and inspected upon arrival at setnet site**  
**CRITICAL CONTROL POINT**
- Hazards were contained  
Hazards: Invertebrate: slugs
- Control measures were implemented  
Control Measures: Remove, kill, dispose
- Control limits were maintained  
Control Limits: Inspection completed immediately upon arrival
- Corrective actions were (performed if necessary)  
Corrective Actions: Inspect as soon as possible
  
- Task # 5: Site occupied and commercial activity operated**
  
- Task # 6: Permittee completes annual field operation: personal and commercial equipment and supplies assembled and transported back to Kodiak**

# HACCP\_Plan\_SetnetSites\_Oct2007