

Observations of Spawning Chum Salmon at Kennedy Creek October 28, 2004: Forests through Time and Space

In groups of two or three (maximum), you will be observing and recording the spawning behavior of a small group of salmon in a short section of stream. Please refer to the "Salmon Spawning Behavior" handout for clarification of any behavioral terms (for additional reading, download the "Chum Salmon Spawning Behavior" article from the class web site).

Observe areas of the stream where spawning-associated behaviors are taking place and watch for a female digging (turning on her side and using her tail fin to beat down on the gravel). Observe the salmon in this area for at least four fifteen-minute intervals, and keep track of all of the behaviors observed using the tables below. Record any additional observations as you feel needed.

Explanations of a few terms follow:

- Weaving is called cutting in some of your reading.
- For females, digging egg pocket is concentrated in deepest area, and associated with very little forward progress
- Probing nest depth with anal fin is usually associated with slight gaping; whereas egg release is associated with prolonged gape and "crouch"
- For males, nudging of other males involves lateral display and gaping

1st 20 minute observation session			
Female Behaviors	Times observed	Male behaviors	Times
Searching for nest site		Quivering next to female	
Attacking another female		"Crossing over" display	
Digging		Nudging female	
Weaving over nest site		Nudging other males	
Digging egg pocket		Biting	
Probing nest depth with anal fin		Chasing	
Egg release		Open mouth rush	
Digging to cover eggs		Body blocks ("T-display")	
Guarding redd		Satellite males changing color	
Attacking male		Milt release	

2nd 20 minute observation session			
Female Behaviors	Times observed	Male behaviors	Times
Searching for nest site		Quivering next to female	
Attacking another female		“Crossing over” display	
Digging		Nudging female	
Weaving over nest site		Nudging other males	
Digging egg pocket		Biting	
Probing nest depth with anal fin		Chasing	
Egg release		Open mouth rush	
Digging to cover eggs		Body blocks (“T-display”)	
Guarding redd		Satellite males changing color	
Attacking male		Milt release	

3rd 20 minute observation session			
Female Behaviors	Times observed	Male behaviors	Times
Searching for nest site		Quivering next to female	
Attacking another female		“Crossing over” display	
Digging		Nudging female	
Weaving over nest site		Nudging other males	
Digging egg pocket		Biting	
Probing nest depth with anal fin		Chasing	
Egg release		Open mouth rush	
Digging to cover eggs		Body blocks (“T-display”)	
Guarding redd		Satellite males changing color	
Attacking male		Milt release	