

# Pacific Salmon Otolith Marking



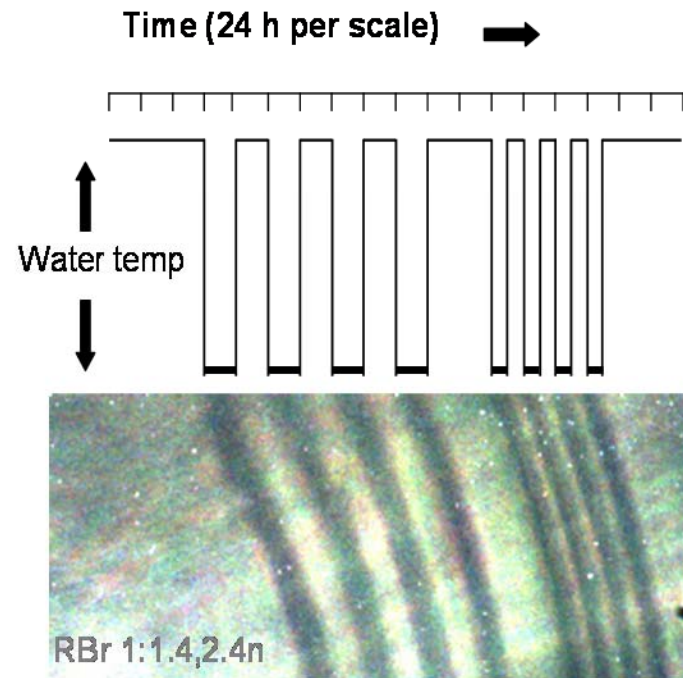
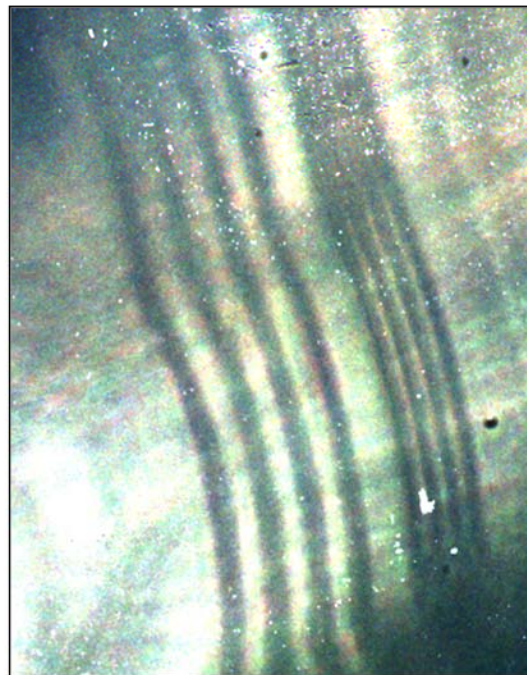
Ron Josephson

Alaska Department of Fish  
and Game

Mark and Tag Coordinator

# Thermal Otolith Marking

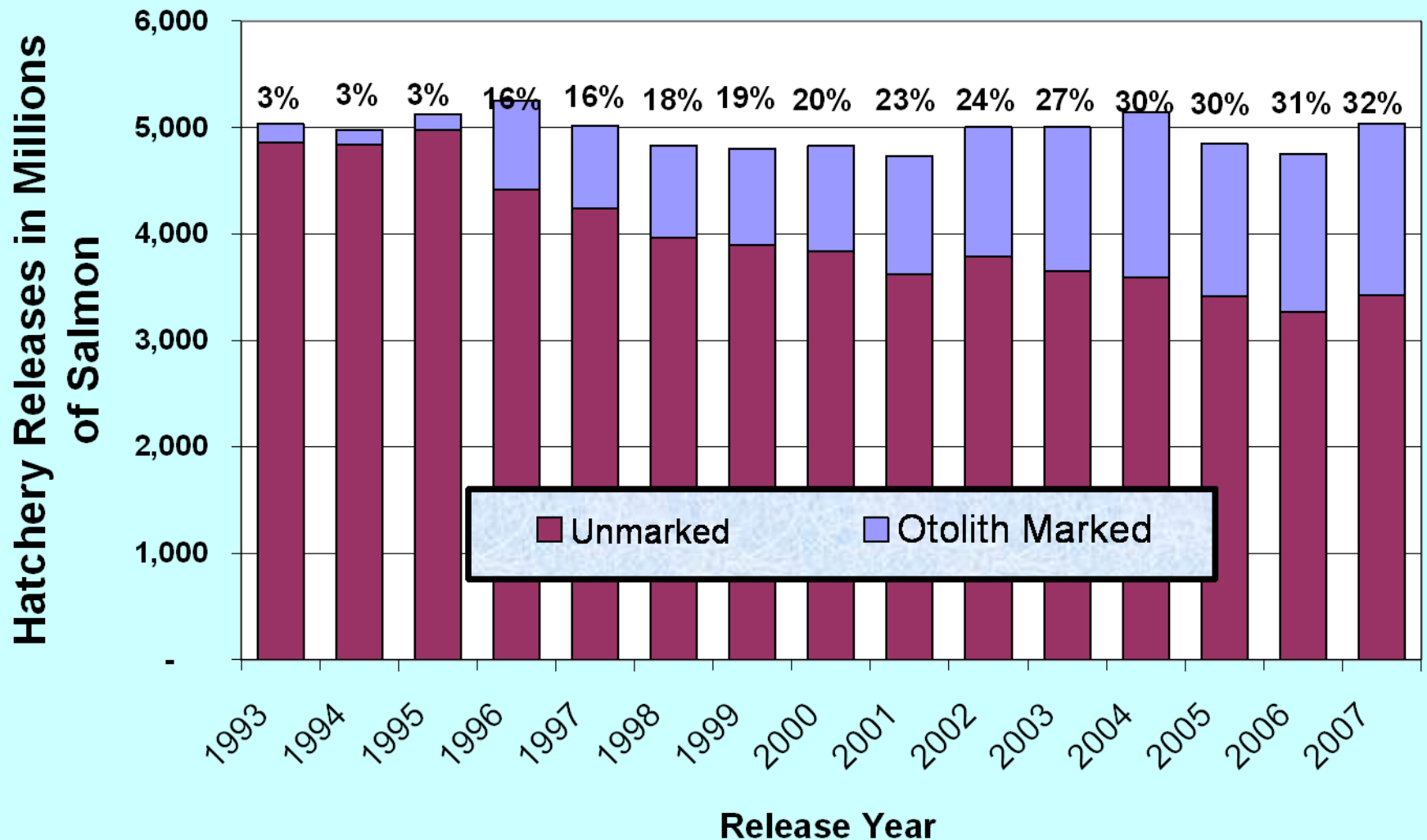
**A dark ring is created in the otolith by a rapid temperature decline of at least 3°C during the eyed egg stage or after hatching. By planning a sequence of temperature changes, hatchery can produce specific marks.**



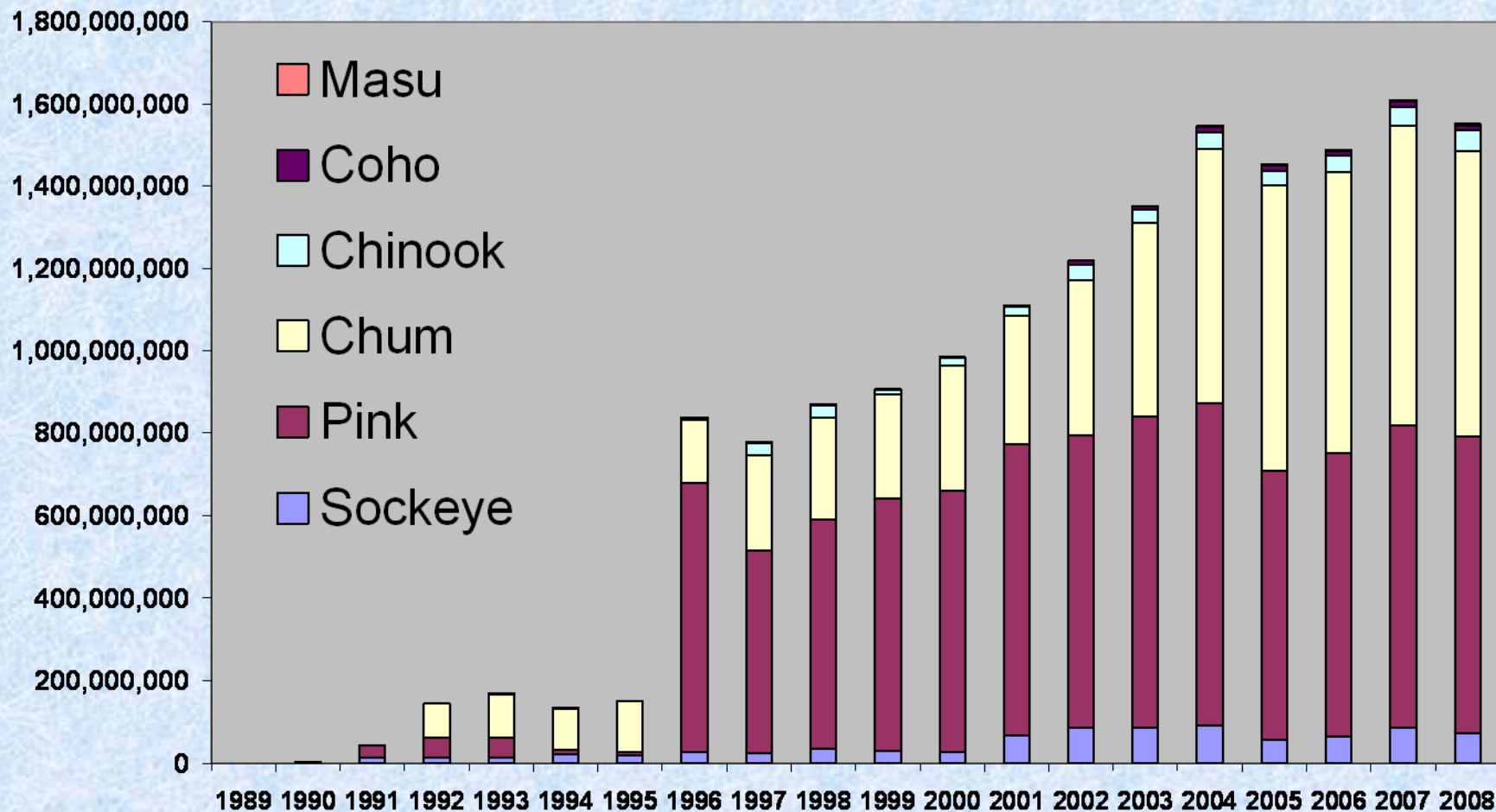


# Working Group on Salmon Marking

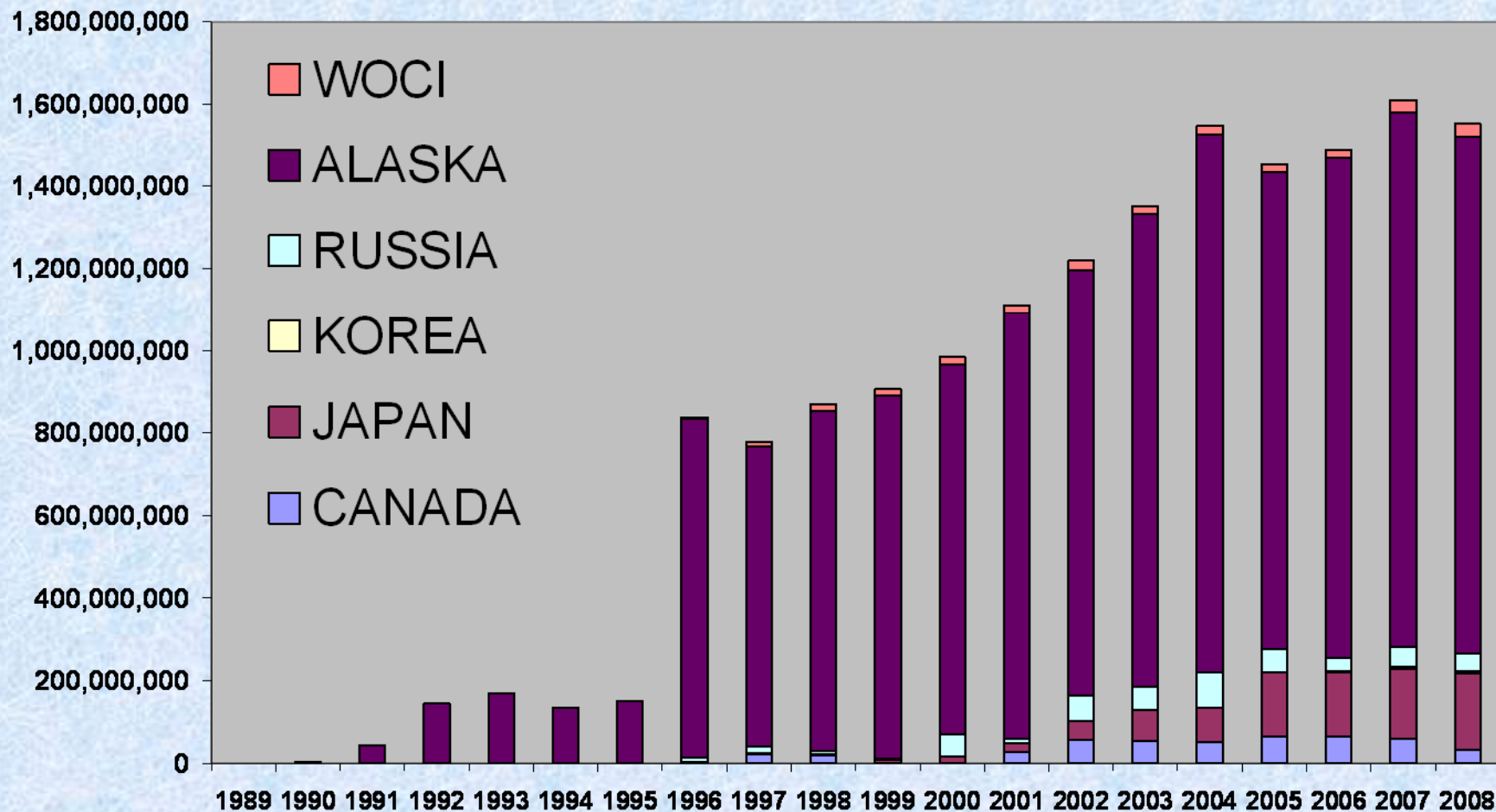
## Growth of Otolith Marking in North Pacific



## Otolith Marked Salmon Releases in the North Pacific by Species



## Otolith Marked Salmon Releases in the North Pacific by Location



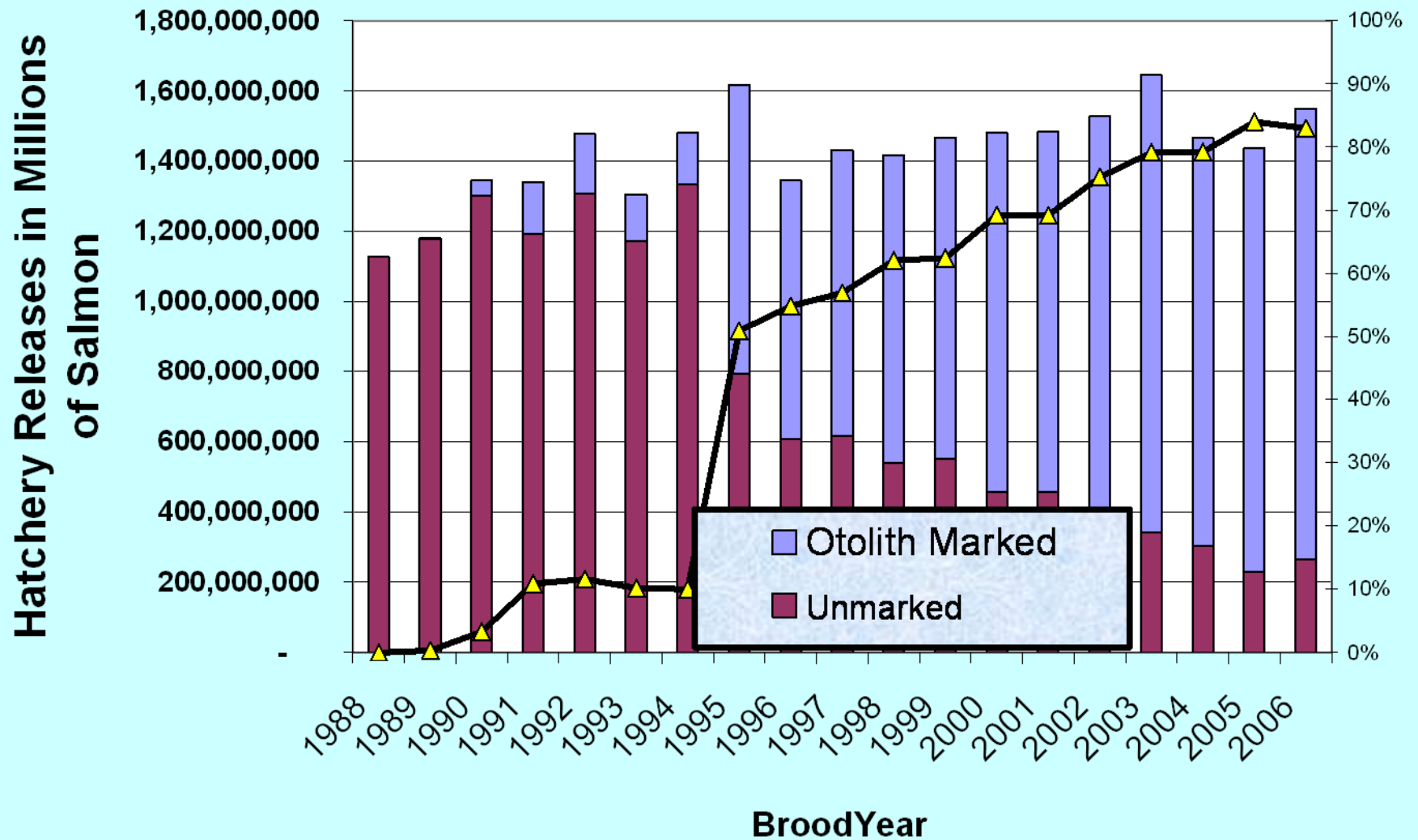






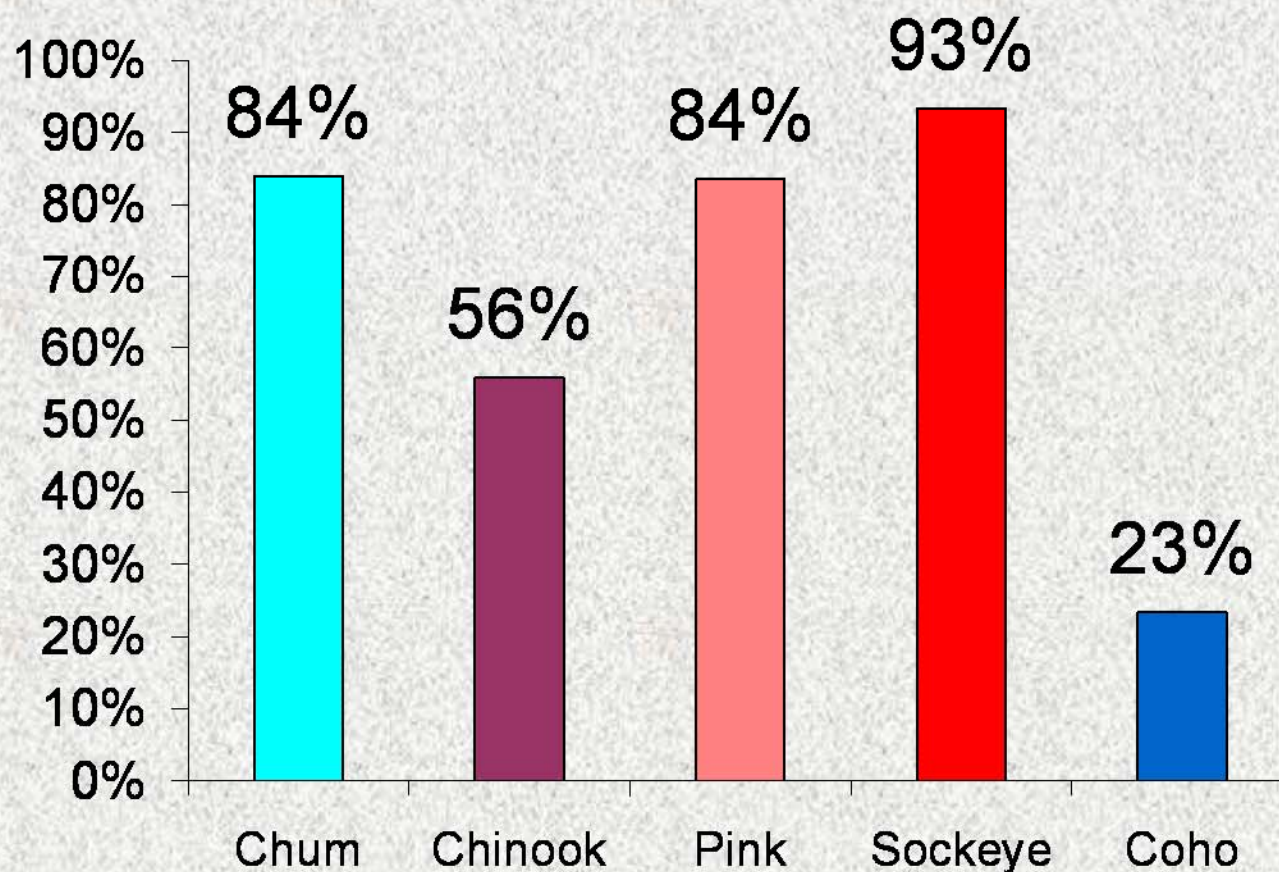


# Growth of Otolith Marking in Alaska

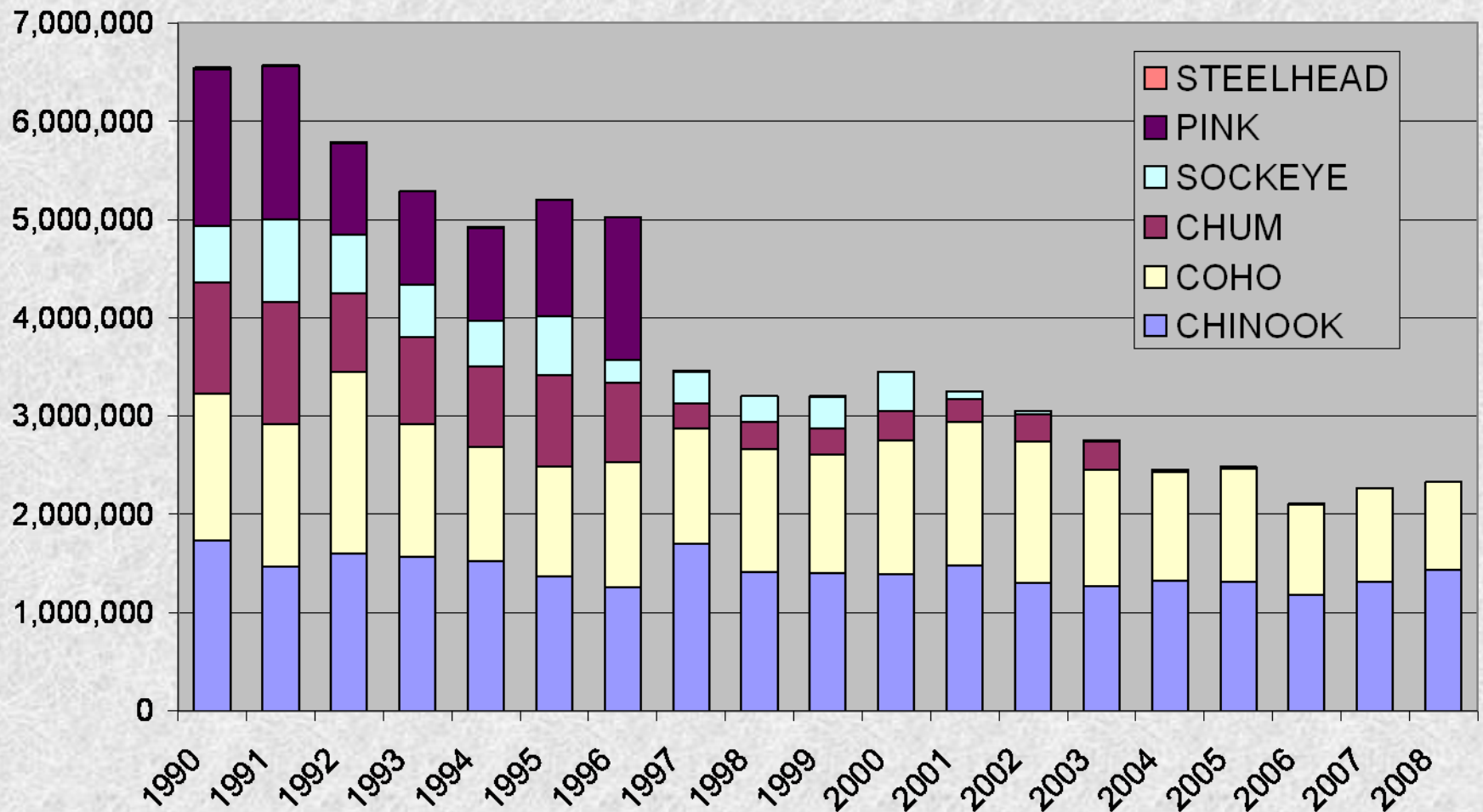




## Percent Release of Otolith Marks by Species in Alaska

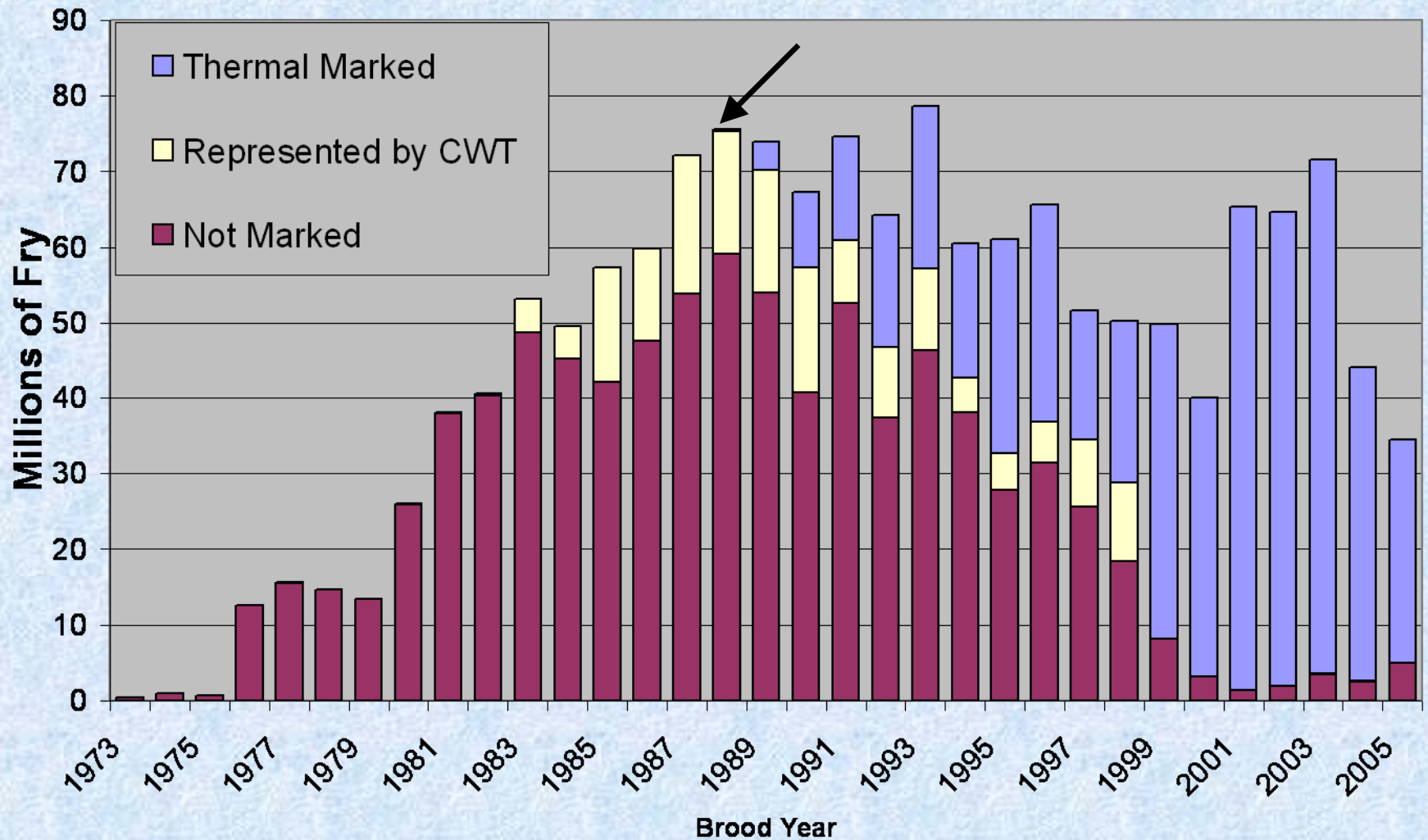


# Releases of Coded Wire Tagged Salmon in Alaska

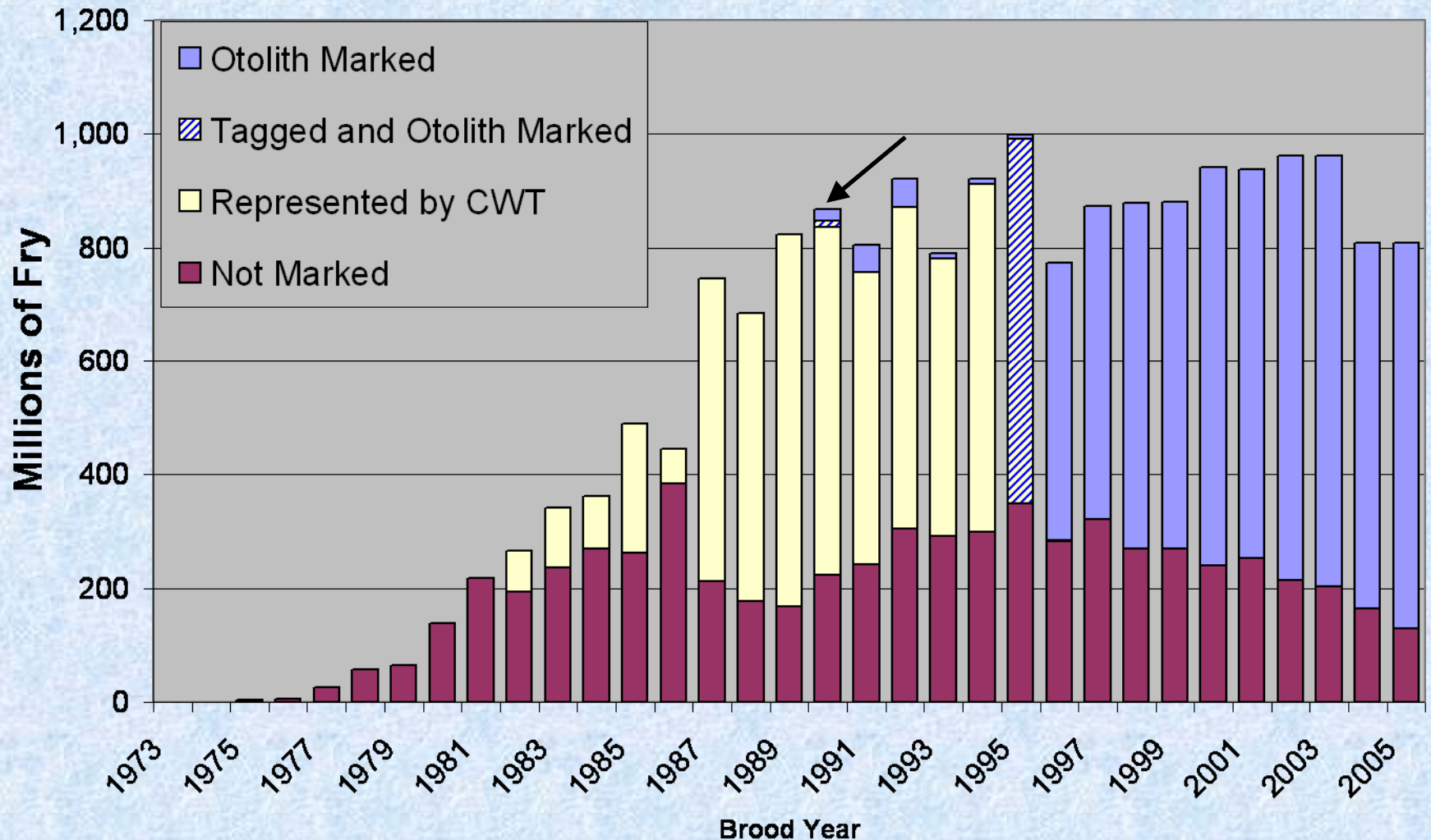




# Releases of Alaska Sockeye Salmon

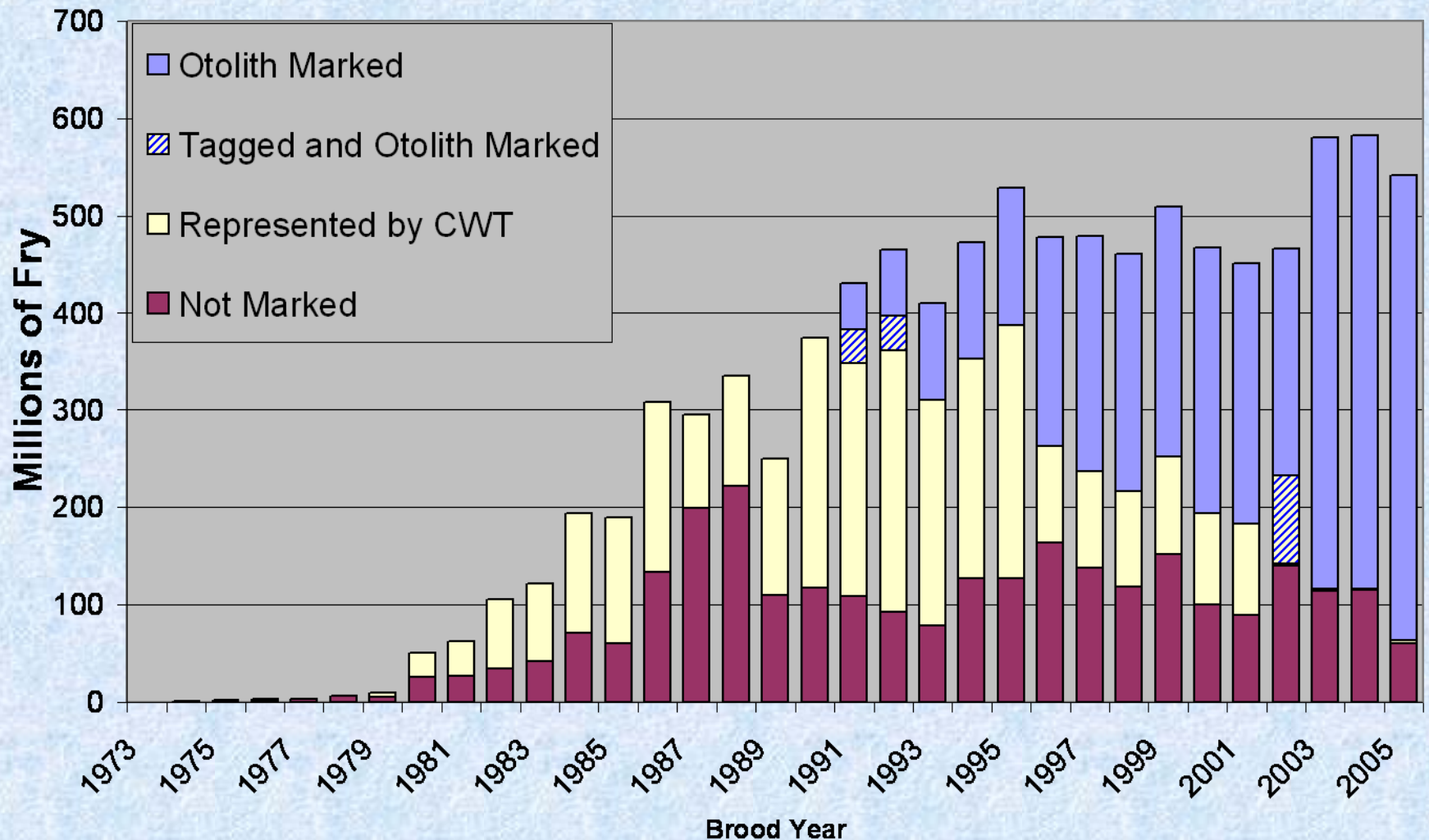


# Releases of Alaska Pink Salmon





# Releases of Alaska Chum Salmon

















# Matched Samples BP and Thermal Mark





