

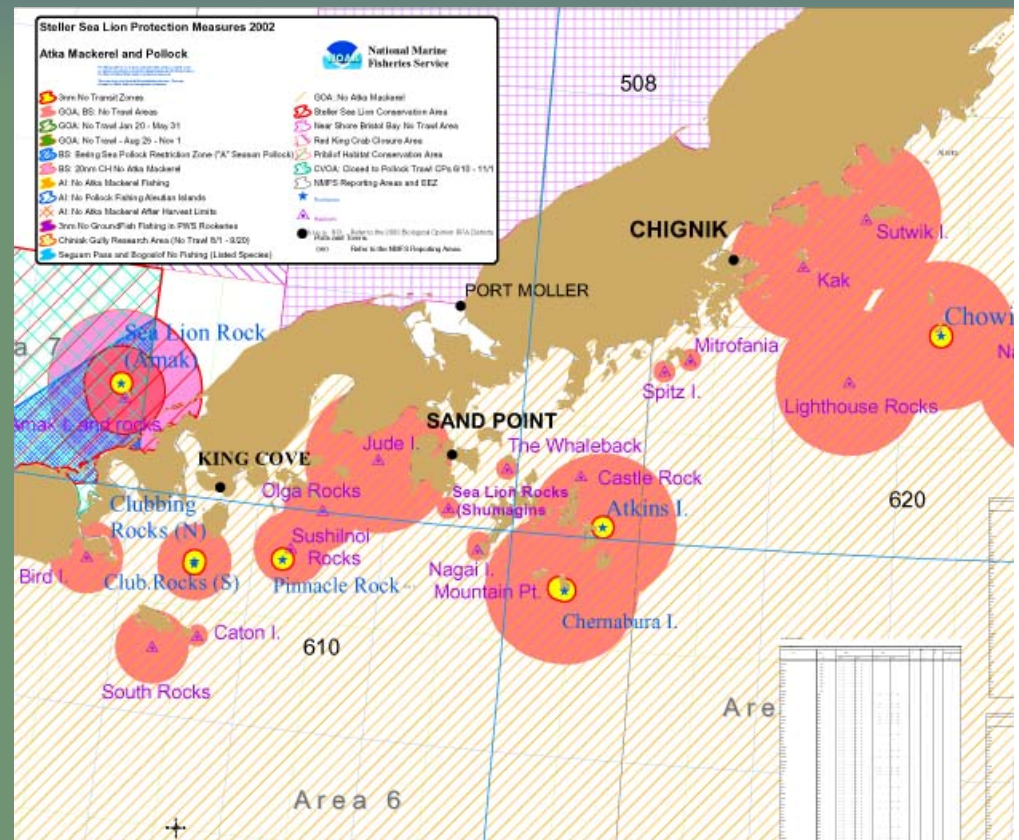


**Assessing Population Trends and  
Dietary Intake of Steller Sea Lion  
Populations along the Western  
Alaska Peninsula and Eastern  
Aleutians**

**Aleutians  
East  
Borough**

# Project Background

- Beth Stewart: Natural Resources Director AEB.
- Kate Wynne: Marine Advisory Program, UAF.



# Project Background

- Objectives: to improve the accuracy and precision of aerial survey data in the Shumagin Islands, to supplement the band-resighting efforts in the area, and to describe the seasonal diets of Steller sea lions in the Shumagin Islands.

Proposal Written by Glenn Merrill of AEB

# Project Background

- Project Manager: Cathy Foy.
- MS Marine Biology- UAF.
- Hired by the Borough in October 2003.
- First Field Work March 2004

# AEB Technicians:



**Peter Devine**

**Allen Mobeck**

**Cherilyn Larsen**

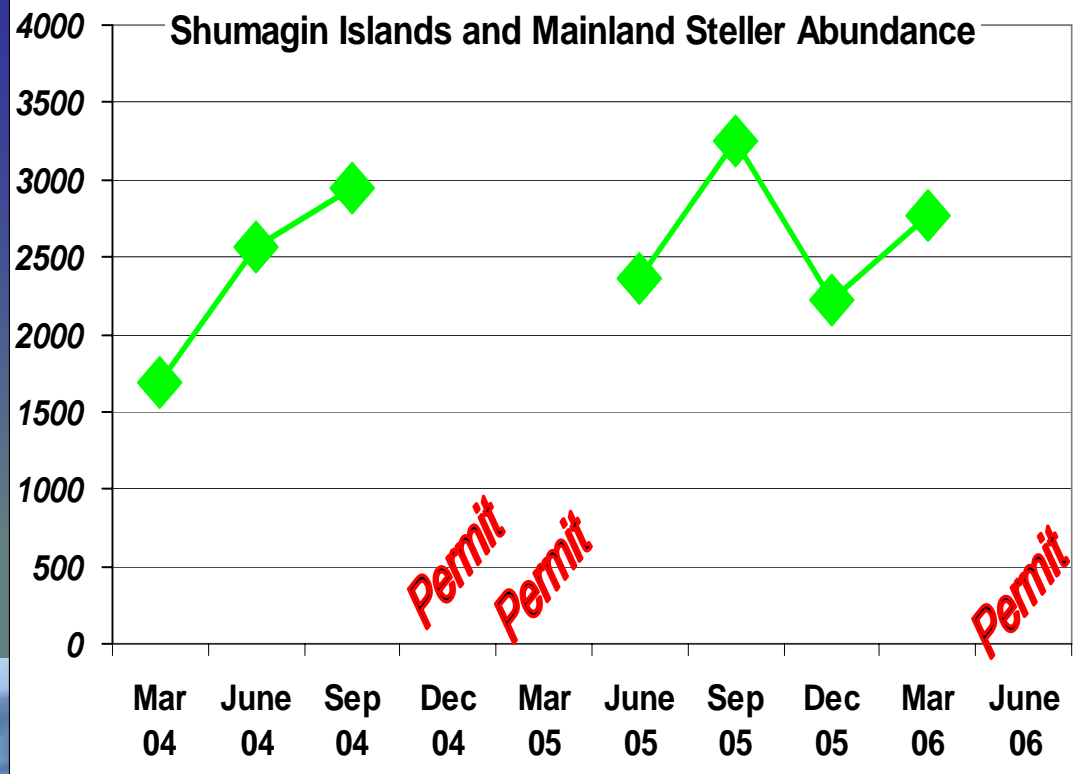
# Aerial Surveys

## WHY?

- Document number of Stellers in Shumagins 4x per year.
- Add precision to Federal NOAA-NMML counts: Repeated counts in June with more complete coverage of coastline.
- Document seasonal changes in haulout locations and numbers.



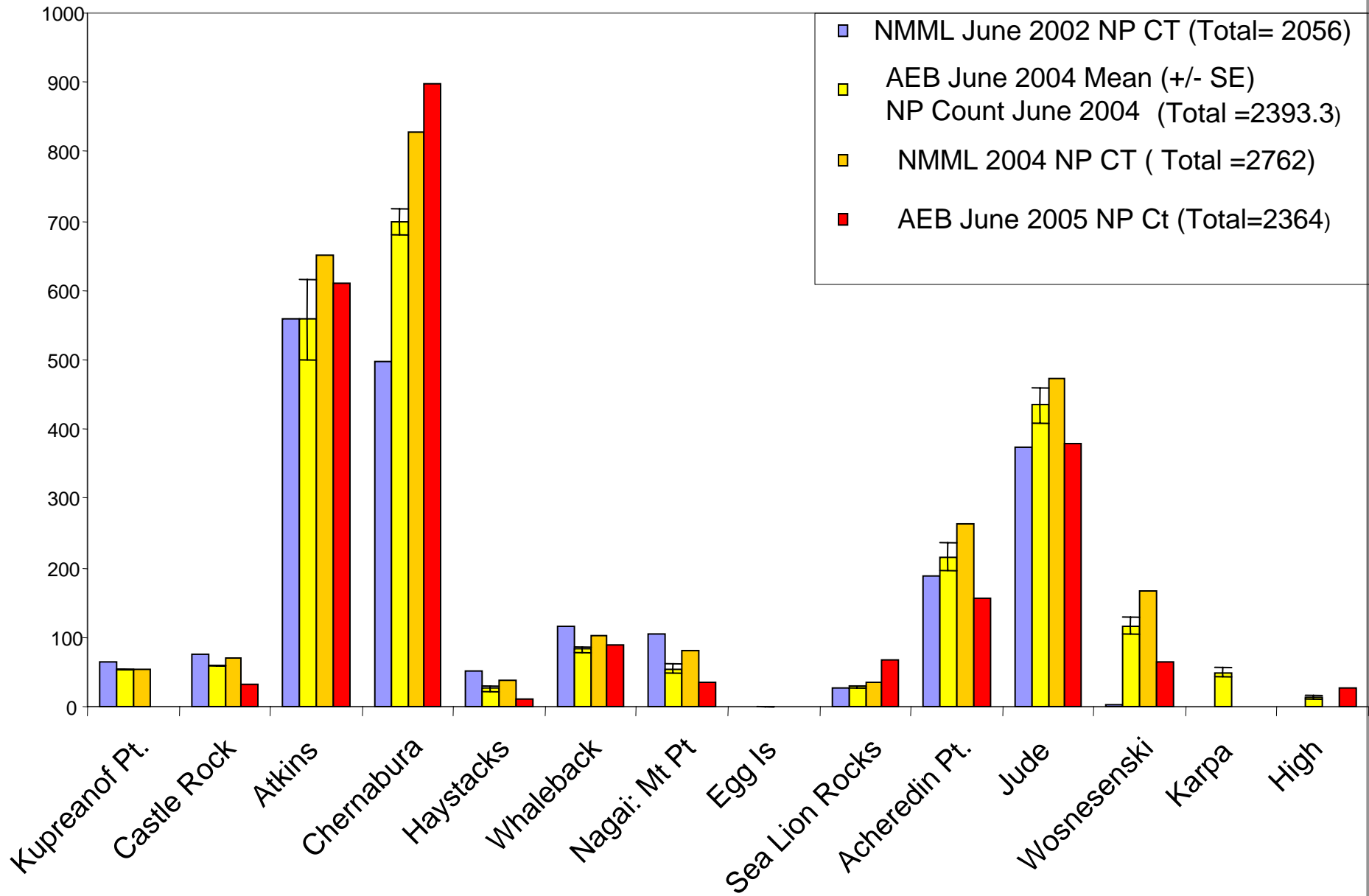






# Map and abundance

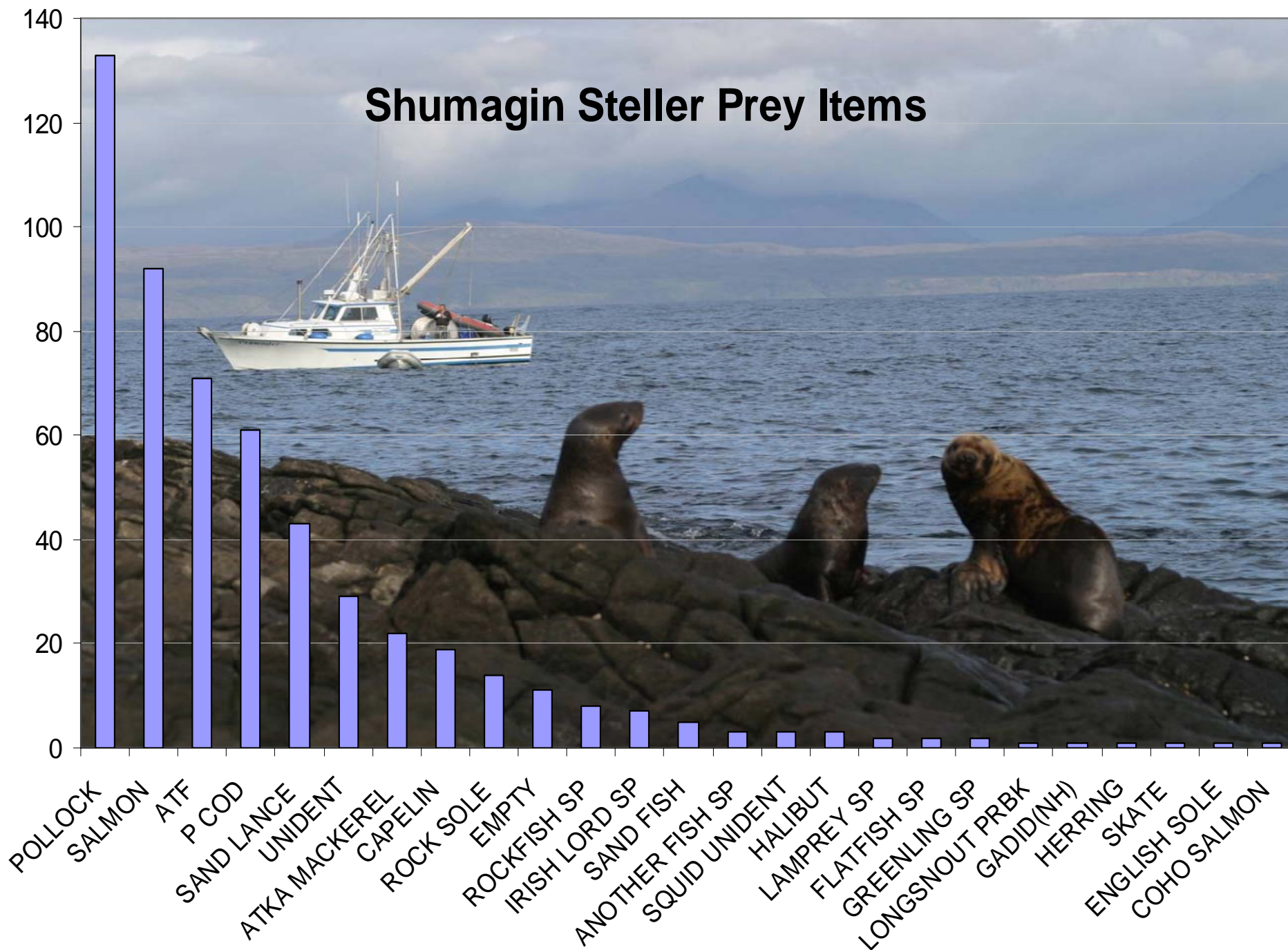
## Interannual Comparison of SSL counts in the Shumagin Islands



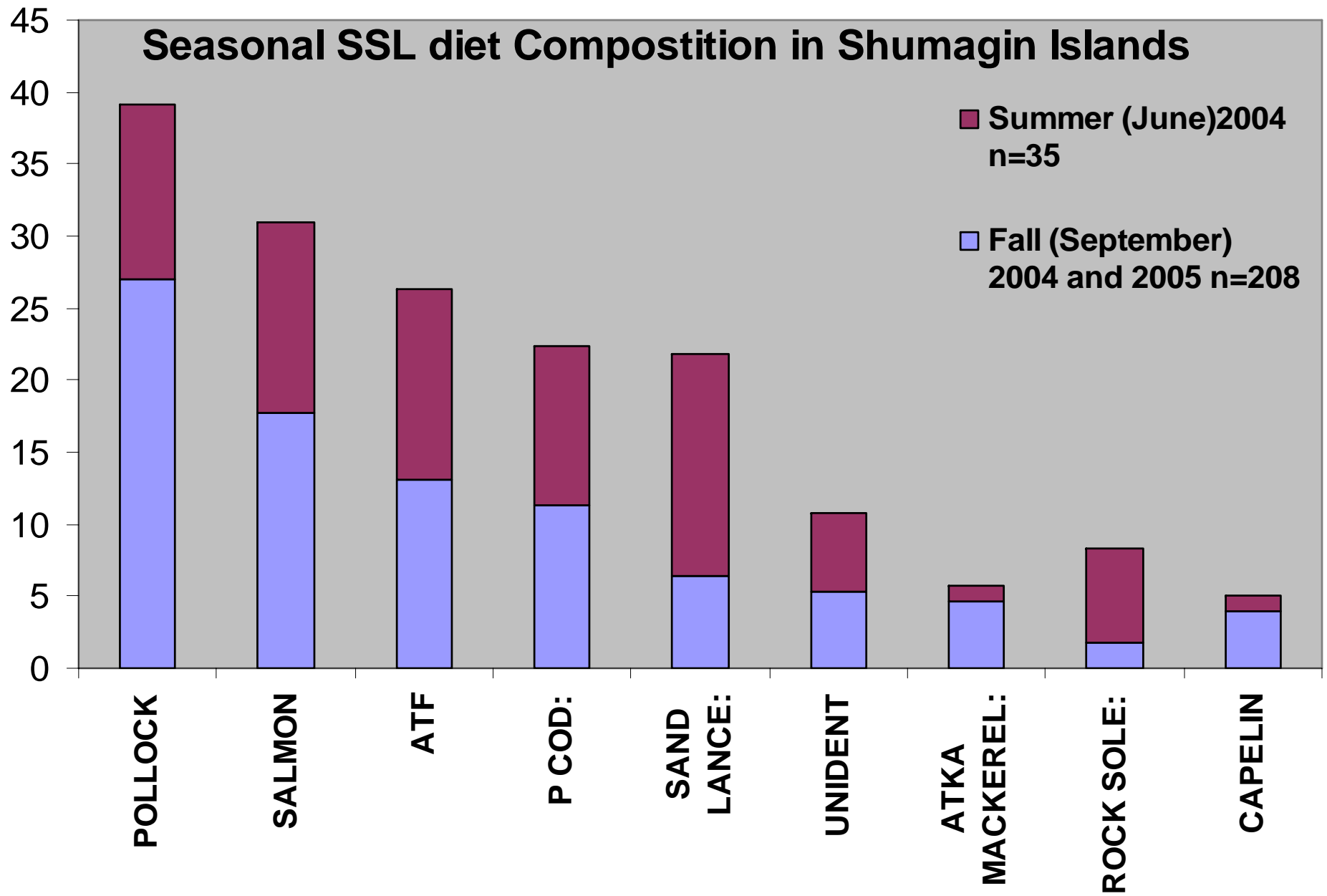
# Diet Analysis



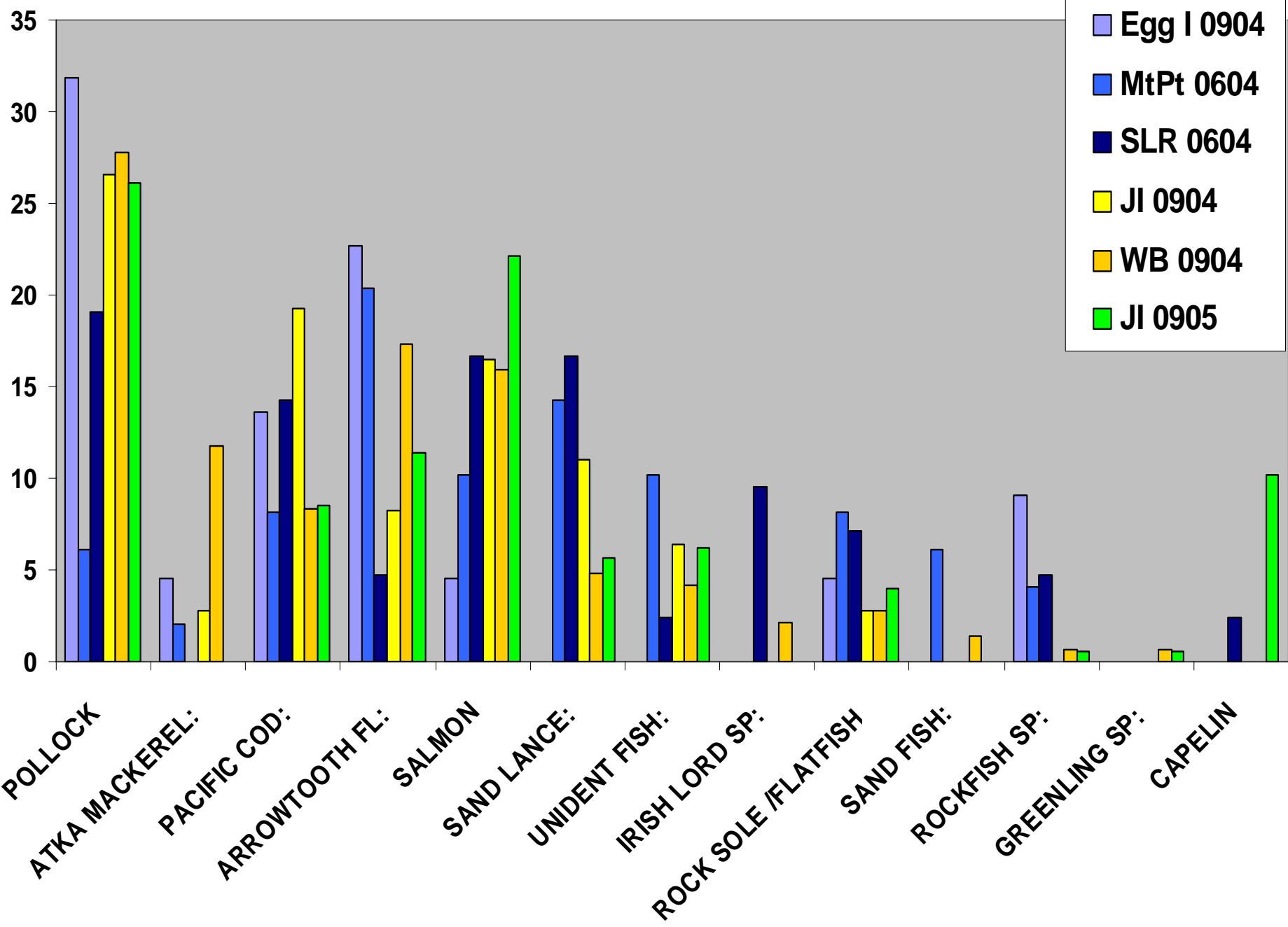
# Shumagin Steller Prey Items



## Seasonal SSL diet Compostition in Shumagin Islands

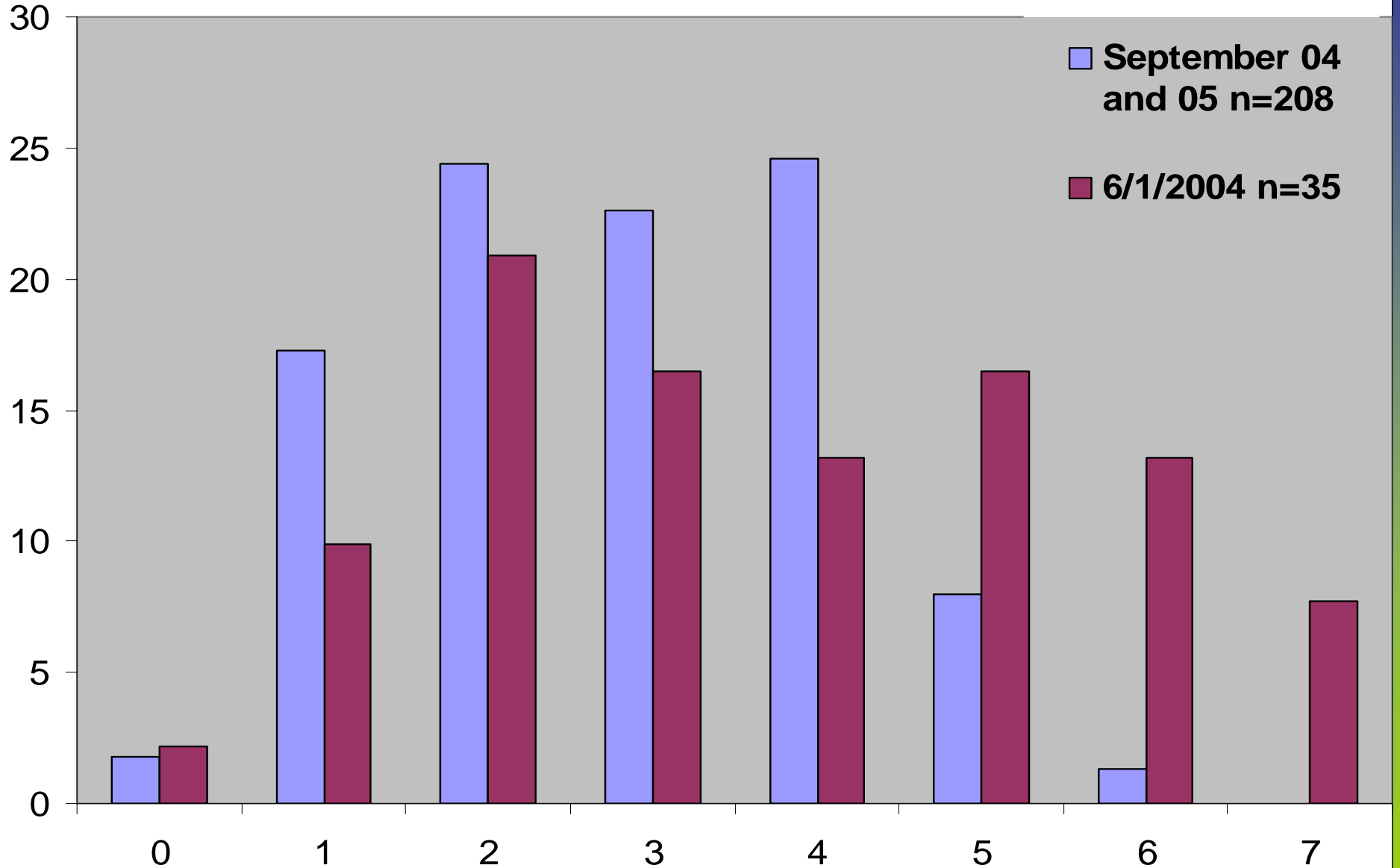


Frequency of Prey Items Expressed as percent





## Shumagin Island Seasonal Diet Richness



# Species present or dominant in w.SSL diet studies

	10 Stoms 1940s	150 Stoms 1950s	16 Stoms 1960s	157 Stoms 1970s	190 Stoms 1980s	3762 Scats 1990s	5000+ Scats 2000s
Pollock	++		++	++	++	++	++
P. Cod	+			+	+	++	++
Flatfish	++	+	+	+	++	++	++
Greenling		+	+			++	+
Rockfish		+	+	+	+	+	+
Smelts		+	++	+		+	++
Sandlance	++	+	+		+	++	++
Herring			+	+	+	+	+
Salmon	++	+		+	+	++	++
Sculpins	+	+	+	+	+	++	++
Cephalopods	+	++	+	+	+	+	+