

Summary of 2006-2007 Pacific Herring Spawning-Ground Surveys and Commercial Catch in Humboldt Bay and Crescent City

John J. Mello
Marine Region, Eureka

The preliminary spawning biomass estimate in Humboldt Bay for the 2006-07 season is 7 tons. This is the lowest biomass estimate recorded in the 11 seasons of spawn assessment surveys conducted in Humboldt Bay, and is just a fraction of the 11 year average of 386 tons. The 2004-05 and 2005-06 seasons were also below the 11 season average with 157 and 111 tons estimated, respectively. Because only a few small fast-moving schools were encountered by Department biologists in Humboldt Bay, no biological data was collected on the spawning population this season. The small number of trace spawns detected this season suggests that some of these schools may have left the bay without spawning. Ken Bates, longtime Humboldt Bay herring permittee, reported seeing only a few scattered marks of herring during his nighttime metering of the bay during the first two weeks of January. There was no fishing effort by Humboldt Bay or Crescent City Harbor permittees this season.

Between 1974 and 2004 close to 79,000 tons of Pacific herring were landed in Humboldt Bay with the yearly average being 39 tons for that 31 year period... The 60 ton quota for Humboldt Bay, which has been in place since the 1982-83 season, has not been reached by permittees since the 2000-01 season. No regulation changes are recommended by the Department for Humboldt Bay and Crescent City.

Pacific herring biomass estimates in Humboldt Bay for seasons when surveys were conducted.

Season	Spawn Escapement (tons)	Catch (tons)	Spawning biomass (tons)
1974-75 ^a	372	1	373
1975-76 ^a	232	12	244
1990-91 ^b	337	63	400
1991-92 ^b	163	62	225
2000-01 ^c	747	61	808
2001-02 ^c	916	34	950
2002-03	137	2	139
2003-04	455	0.6	446
2004-05	156	0.6	157
2005-06	111	(no fishing effort)	111
2006-07	7	(no fishing effort)	7
Mean	330	26	386

(a) Rabin and Barnhart, 1986
 (b) Spratt et al, 1992
 (c) Spawn escapement estimates from the 2000-01 to 2005-06 seasons revised 09 Feb 2007.

