

Pacific Whiting Harvest Specifications and Management Measures



Photo: Greg Gillson. Perpetua Bank

Stock Assessment Concerns

“The Panel failed to follow the assessment terms of reference and produced a base model for catch advice that has serious technical flaws. The ABC forecast from this base model, if implemented, has a high risk of causing serious harm to the hake stock.”

- A. Sinclair, S. Martell, C. Grandin, J. Fargo – members of the
STAT Team

Stock Assessment Concerns Cont...

“...the hake population is dominated by a single year-class now 9 years old, the population biomass is declining and at its historic minimum, the exploitation rate is increasing and at its historic maximum, and there is no indication of good recruitment. Prudent management suggests catches should be reduced under these circumstances, not increased.” - Ibid.

2007 vs. 2008

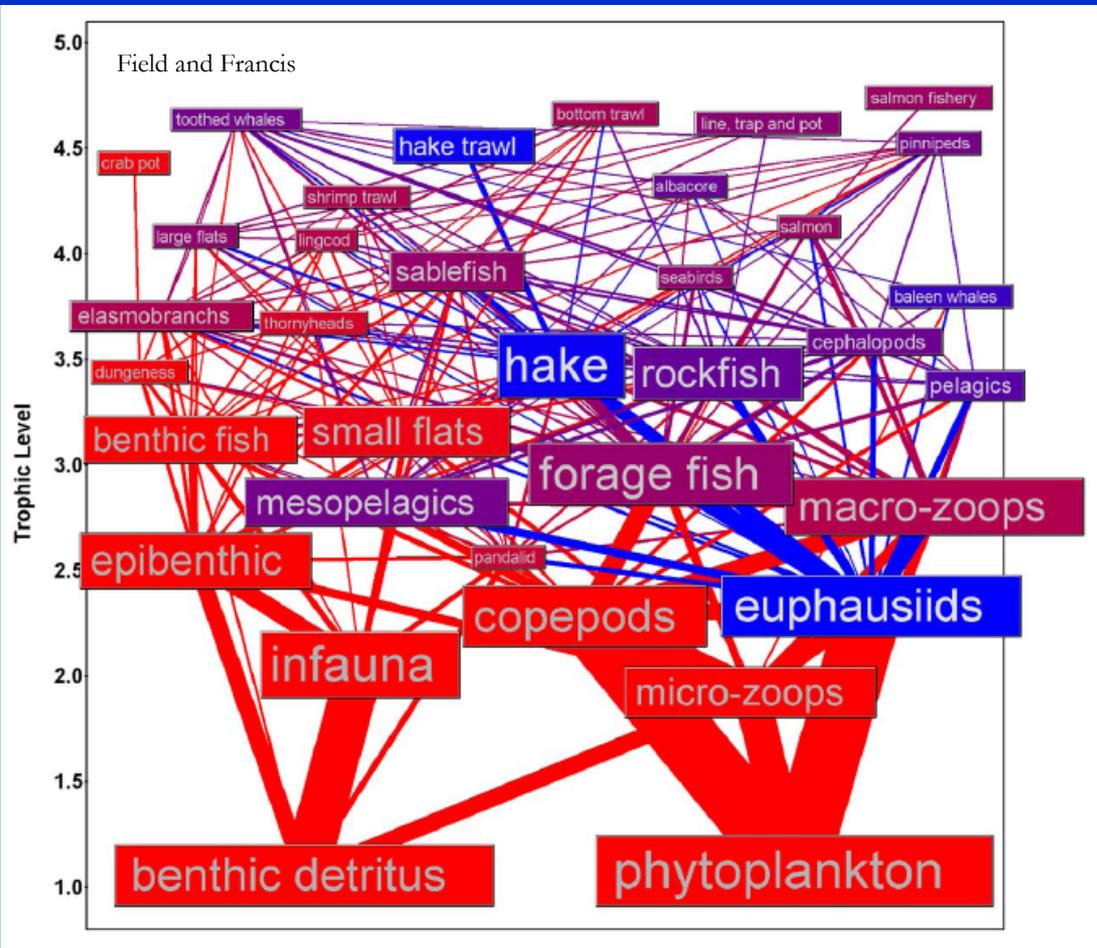
Comparison of the SS2 Base Model

Year	Spawning Biomass	Unfished Biomass Bzero	Relative Depletion
2007 - 2007 <i>assessment</i>	1.146 million mt (0.79 – 1.502)	3.57 (3.14 - 4.0)	32.1% (24.3% - 39.7%)
2007 - 2008 <i>assessment</i>	1.067 million mt (0.472 – 1.775)	2.89 (1.556 – 2.5)	36.8% (23.7% - 50.1%)

Hesler et al. February 21, 2008 and Feb. 14, 2007.

“As such, spawning biomass for the most recent years, while generally lower than predicted in the 2007 assessment, is greater relative to the estimate of SBzero and therefore results in a higher depletion estimate.”

Account for Ecosystem Needs



“If the United States is to manage fisheries within an ecosystem context, food-web interactions, life-history strategies, and trophic effects will need to be explicitly accounted for when developing harvesting strategies.”

National Research Council
Committee on Ecosystem Effects
of Fishing (2006).

Minimize Bycatch

Chinook Salmon Catch in the Pacific Whiting Fisheries

Year	2004	2005	2006	2007
Chinook number	8,751	11,916	3,954	6,186



Recommendations

- Hard bycatch caps and area closures for overfished/ depleted rockfish and salmon
- Improved monitoring (address EC findings September 2007).
- Management Strategy Evaluation to determine whether the current harvest policy is appropriate for Pacific whiting and ecosystem needs.

Recommendations

“Given the current status of the stock, declining biomass, poor recruitment, spiking exploitation rates, and the high degree of uncertainty regarding key vital population parameters, it seems prudent to forecast the ABC at a lower exploitation rate than what has been estimated for the past several years.”

- A. Sinclair, S. Martell, C. Grandin, J. Fargo – members of the
STAT Team

OY Recommendation

Given high degree of uncertainty in the model, declining trends, and lack of ecosystem considerations, we recommend no increase in the current catch level until a Management Strategy Evaluation is conducted evaluating the best whiting catch strategy and to account for ecosystem needs.

Risk Neutral: Status Quo OY = 328,358 mt coastwide

Risk Averse Policy = 264,000 mt (Martell, S. Feb 19, 2008)