

**GROUND FISH MANAGEMENT TEAM (GMT) REPORT  
 ON FINAL CONSIDERATION OF INSEASON ADJUSTMENTS  
 FOR 2007 AND 2008**

2007 INSEASON ADJUSTMENTS

COMMERCIAL

Non-Whiting LE Trawl for 2007

The GMT considered the request to increase sablefish limits in the non-whiting trawl fishery for the remainder of the year. The current catch of sablefish in the trawl sector is several hundred tons below the allocation and, under currently scheduled limits, the allocation of sablefish is not expected to be attained. Therefore, the GMT analyzed increasing sablefish trip limits in the trawl fishery for period 6 and recommends the following:

- Increase sablefish limits for large and small footrope trawl gear north of 40°10' N. lat. to 30,000 lbs per/2 months for the remainder of 2007 on or as close as possible to December 1.
- Increase sablefish limits south of 40°10' N. lat. to 30,000 lbs/2 months for the remainder of 2007 on or as close as possible to December 1.

The rebuilding species impacts and target species catches, as well as proposed trip limit tables and current Rockfish Conservation Area (RCA) boundaries are shown below.

**Table 1.** Rebuilding species impacts and target species catches under proposed 2007 inseason management actions for the non-whiting trawl fishery.

	Species	North	South	Total	Harvest Target
Rebuilding Species	Canary	9	1.1	10.1	
	POP	80.07	.00	80.0	
	Darkblotched	211.6	32.6	244.1	
	Widow	1.7	0	1.8	
	Bocaccio	0	25.2	25.2	
	Yelloweye	0.4	0	0.4	
	Cowcod	0	1.4	1.4	
Target Species	Sablefish	2,197	437	2,633	2,651
	Longspine	651	322	973	2,220
	Shortspine	712	266	978	1,634
	Dover	8,626	1,890	10,516	16,500
	Arrowtooth	3,510	89	3,599	5,800
	Petrals	2,021	395	2,416	2,499
	Other Flat	1,142	493	1,635	4,884
	Slope Rock	131	156	287	1,786

**Table 2.** Proposed Trip Limit Adjustments for the Remainder of 2007.

Area	Period	Shoreward Seaward		Sable	Longspine	Shortsp	Dover	Othr Flat	Petrale	Arrow'th	Slope Rock	
		Line	Line									
N 40 10	1	75	150	13,000	22,000	7,500	80,000	110,000	50,000	100,000	4,000	
	2			13,000	22,000	7,500	80,000	110,000	30,000	100,000	4,000	
	3			15,000	22,000	10,000	60,000	110,000	20,000		1,500	
	4	see attached table		15,000	25,000	10,000	60,000	110,000	20,000	Combined		1,500
	5		200	22,000	25,000	12,000	95,000	150,000	20,000	with Other		1,500
	6	75	200*	<b>30,000</b>	25,000	12,000	95,000	150,000	40,000	Flat		1,500
North Select Flatfish	1	75	150	5,000	3,000	3,000	40,000	90,000	16,000	90,000	4,000	
	2			8,000	3,000	3,000	40,000	90,000	25,000	90,000	4,000	
	3			5,000	3,000	3,000	38,000	70,000	20,000		1,500	
	4	see attached table		5,000	3,000	3,000	38,000	70,000	20,000	Combined		1,500
	5		200	5,000	3,000	3,000	38,000	70,000	15,000	with Other		1,500
	6	75	200*	5,000	3,000	3,000	25,000	30,000	8,000	Flat		1,500
38 to 40 10	1	100	150	14,000	22,000	7,500	70,000	110,000	50,000	10,000	15,000	
	2	100	150	14,000	22,000	7,500	70,000	110,000	30,000	10,000	15,000	
	3	100	150	14,000	22,000	7,500	70,000	110,000	25,000		15,000	
	4	100	150	14,000	22,000	7,500	80,000	110,000	25,000	Combined		10,000
	5	100	150	22,000	25,000	13,000	95,000	150,000	25,000	with Other		10,000
	6	100	150	<b>30,000</b>	25,000	13,000	95,000	150,000	50,000	Flat		15,000
S 40 10	1	100	150	14,000	22,000	7,500	70,000	110,000	50,000	10,000	40,000	
	2	100	150	14,000	22,000	7,500	70,000	110,000	30,000	10,000	40,000	
	3	100	150	14,000	22,000	7,500	70,000	110,000	25,000		40,000	
	4	100	150	14,000	22,000	7,500	80,000	110,000	25,000	Combined		40,000
	5	100	150	22,000	25,000	13,000	95,000	150,000	25,000	with Other		55,000
	6	100	150	<b>30,000</b>	25,000	13,000	95,000	150,000	50,000	Flat		55,000

**Table 3.** Current 2007 RCA Boundaries for the Non-Whiting Trawl Fishery North of 40°10' N. Lat.

Rockfish Conservation Area North of 40 deg 10 min Lat

	Jan-Feb	March-April	May-June	Jul-Aug	Septembr-Octobr	Nov-Dec
North of Alava			shore-150		shore-200	75-200*
Alava - Leadbetter			75-150		75-200	75-200*
Leadbetter - OR/WA Border			60-150		60-200	75-200*
OR/WA Border - Cascade Head	75-250*	75-250	75-150		75-200	75-200*
Cascade Head - Humbug Mt			75-200			75-200*
Humbug Mt - Cape Arago			shore-200			75-200*
Cape Arago - 40 deg 10 min Lat			75-200			75-200*

\*Indicates modified petrale areas

Open Access Daily Trip Limit (DTL) Fishery Between of 36° and 40°10' N. lat.

The Council requested that the GMT reconsider the Groundfish Advisory Subpanel (GAP) proposal to increase the sablefish DTL fishery limits between of 36° and 40°10' N. lat. relative to the 2007 sablefish optimum yield (OY) and specifically whether there would be associated yelloweye rockfish impacts. The GMT evaluated the amount of yelloweye rockfish impacts and upon further review of available information, the GMT does not believe that yelloweye rockfish are a concern at depths greater than 150 fm south of 40°10' N. lat. Therefore, the GMT recommends increasing the open access (OA) DTL limits to 300 lbs per day, 1,000 lbs per week, and 3,000 lbs/2 months beginning December 1, or as close as possible thereafter, through the remainder of 2007.

## 2008 INSEASON ADJUSTMENTS

### RECREATIONAL

#### *Washington and Oregon*

Washington Department of Fish and Wildlife (WDFW) and Oregon Department of Fish and Wildlife (ODFW) staff reviewed the 2007 recreational fishery harvests to project overfished species impacts for 2008 and revised the scorecard accordingly.

#### *California*

California Department of Fish and Game (CDFG) does not currently have revised 2007 California Recreational Fisheries Survey (CRFS) recreational catch data available to appropriately model the projected catch of scorecard species in 2008 (see Agenda Item D.6.c). CDFG intends to manage catch at or below the harvest guidelines for the California recreational fishery. The 2008 scorecard values represent projected impacts, at the harvest guideline levels. This estimate will be revised in March 2008 after data are available to model catch projections for the 2008 season.

### COMMERCIAL

#### Open Access

##### *Open Access Sablefish Daily Trip Limit Fishery (Between 36° and 40°10' N. lat.)*

The GMT explored opportunities for liberalizing the OA daily trip limit (DTL) fishery north of the Conception area. The GMT reviewed target species catch projections relative to overfished species impacts and an increase in trip limits can be accommodated. Therefore, the GMT recommends setting OA DTL limits at 300 lbs per day, 800 lbs per week, 2,400 lbs/2 months.

##### *Conception Area OA Sablefish (South of 36° N. Latitude)*

The GMT and GAP re-evaluated the Council motion that Conception area sablefish limits be set at 300 lbs per day or 1 landing per week of up to 800 lbs relative to the 2008 sablefish OY. The GMT emphasizes that available information indicates that increased effort and per-vessel catch in the OA fishery have been responsible for an increase in Conception area sablefish landings. The increased trip limits in August 2007 combined with speculations regarding OA limitation caused an increase in effort. Unless effort in the Conception area is decreased, the 2008 OY will be exceeded. Furthermore, the limited entry (LE) fixed gear sector may be adversely affected by increases in the OA fishery. Therefore, the GMT recommends that Conception area sablefish limits in the OA fishery be reduced to 300 lbs per day or 1 landing per week of up to 700 pounds for all of 2008. These limits would be lower than the limits proposed for the north and would encourage vessels to return to the northern areas. These trip limits would remain unchanged if the Nature Conservancy exempted fishing permit (EFP) receives final approval. The GMT will track sablefish landings throughout the 2008 season and re-evaluate whether a bi-monthly limit should be set at a later date.

#### Limited Entry Fixed Gear

##### *Shortspine Thornyheads South of 34° 27' N Lat.*

The GMT was asked to maintain the increase in the LE fixed gear limits for shortspine thornyhead south of 34°27' N. lat. that were adopted in June 2007 and subsequently revisited at the September 2007 Council meeting. The trip limit in this area is currently 3,000 lbs/2 months.

The GMT was originally concerned that increasing this trip limit would increase effort, resulting in higher sablefish catch and higher catches of other species and a premature closure of other fishing opportunities.

Current data indicates shortspine catches south of 34°27' N. lat. are well within the 421 mt OY and the inseason increases for shortspine made in 2007 did not result in a significant effort shift. The GMT does not anticipate a change in behavior for 2008 and recommends that the LE fixed gear shortspine limit south of 34°27' N. lat. be maintained at 3,000 lbs/2 months for all of 2008.

#### Limited Entry Non-Whiting Trawl

##### *Limited Entry Non-Whiting Trawl Coastwide*

The GMT reviewed the Council's request to have trip limits under Alternative 2 be equal to those under Alternative 1 to determine the canary rockfish savings. If Alternative 2 limits were set equal to Alternative 1, the canary impacts would be reduced by 0.1 mt.

Based on the Council's assessment that 5.5 mt of canary rockfish would accommodate research catch in 2008, and the guidance to provide recreational fishery projected impacts instead of harvest guidelines, the GMT recommends that the Council adopt Alternative 2, the low LE non-whiting trawl proposal covered under the initial inseason agenda item (Agenda Item D.6.b, Supplemental GMT Report 2).

##### *Chilipepper – South of 40°10' N. lat.*

The GMT received a request to increase trip limits for chilipepper rockfish south of 40°10' N. lat using small footrope gear. In past years, the GMT has stated our concern that chilipepper is more highly associated with bocaccio, and therefore increasing chilipepper opportunities may be problematic if bocaccio impacts are increased. The amount of bocaccio remaining in the 2008 scorecard is 101.9 mt, meaning that there is room to accommodate increased bocaccio impacts if increased impacts would occur as a result of expanded chilipepper opportunities. The GMT has also been concerned with canary rockfish impacts that may occur if chilipepper targeting occurred. However, available data shows that the majority of chilipepper caught in the trawl fishery is discarded, meaning that some increase in cumulative limits may be acceptable because it would prevent regulatory discard and should not invoke targeting. Therefore, the GMT considered the existing level of chilipepper rockfish discard relative to cumulative limits that may encourage targeting (and therefore increase overfished species impacts). The GMT recommends increasing chilipepper rockfish limits with small footrope trawl gear south of 40°10' N. lat. to 2,000 lbs/2 months, which will reduce discard without encouraging chilipepper targeting.

#### Limited Entry Non-Tribal Whiting

The GMT analyzed seasonal distributions of whiting catch and bycatch data from 2004-2007 to help facilitate the discussion of potential management measures for the 2008 non-tribal whiting fishery. Current options considered by the Council include: 1) season start date changes, 2) timed or scheduled releases of bycatch limits, and 3) sector-specific bycatch caps. The GMT understands that such actions are not routine and would require a two-meeting process and analysis in an environmental assessment tiered to the 2007-08 specifications EIS. Such actions would necessarily require re-prioritization of Council initiatives since the GMT, state, NMFS, and Council staffs are fully subscribed with assigned duties.

Inseason adjustments, based on the performance of the fishery is a routine tool. In recent years, GMT analyses of whiting fishery bycatch has been used to inform bycatch limits. These limits have often been adjusted later in the season as inseason fishery data is made available to managers that suggests such an adjustment is needed. In 2007, the team deviated from the standard practice of using a weighted average for widow rockfish. Due to obvious increasing trends in the fishery, the team used linear interpolation. It was apparent that the bycatch rates observed in 2007 were steeper than the slope predicted by the interpolation method. Therefore, the team will review appropriate methodologies and potential widow bycatch limits, and will bring forth our recommendation at the March 2008 Council meeting.

In 2008, the team recommends that the Council establish the bycatch limit using historic fishery information in conjunction with the setting of the 2008 whiting OY in March. At the June 2008 Council meeting, the GMT would review the performance of the California early season as well as data from the first three weeks of the at-sea fishery. At the September meeting, the GMT would have up to 13 additional weeks of data from the at-sea sector and up to 11 weeks of data from the shoreside fishery. Depending on the performance of the fishery, in either June or September the bycatch limit could be adjusted, if necessary.

#### *Seasonal Patterns in Bycatch*

Whiting data was initially analyzed with Generalized Additive Models, where the independent variables included sector, year, month, week into season, and the interactions of these main effects. Smoothing of these variables was used, where possible. Most of the interactions were significant; however, trends were difficult to interpret with this small, unbalanced dataset. Therefore, separate sector models with only month as a categorical variable was used to look at the monthly trend, over all years, and by sector (Figures 1-3). The plots reveal that bycatch of darkblotched, Pacific ocean perch (POP), and widow in the catcher-processor sector decreases as the season progresses. The trend for canary is less certain but there is a slight decline. Mothership participation in the whiting fishery is greatest in May and June, but less in summer and fall. As a result, confidence intervals are wide and trends are less certain. However, for darkblotched, widow, and canary rockfish some decrease in bycatch is evident. For the shoreside fishery, seasonal bycatch trends are less evident, though an increase in POP bycatch is seen later in the year. Specifically, the lack of data later than August precludes meaningful insight for seasonal trends in this sector.

## GMT Recommendations

### 2007 Season

1. Increase sablefish limits for large and small footrope trawl gear north of 40°10' N. lat. to 30,000 lbs/2 months for the remainder of 2007 on or as close as possible to December 1.
2. Increase sablefish limits south of 40°10' N. lat. to 30,000 lbs/2 months for the remainder of 2007 on or as close as possible to December 1.
3. Increase the OA sablefish DTL limits between 36° and 40°10' N. lat. to 300 lbs per day, 1,000 lbs per week, 3,000 lbs/2 months for the remainder of 2007 on or as close as possible to December 1.

### 2008 Season

1. Increase OA sablefish DTL limits north of the Conception area (north of 36° N. lat.) to 300 lbs per day, 800 lbs per week, 2,400 lbs/2 months for all of 2008.
2. Increase Conception area (south of 36° N. lat) sablefish limits to 300 lbs per day or 1 landing per week of up to 700 pounds for all of 2008.
3. Increase the LE fixed gear shortspine limit south of 34°27' N. lat. to 3,000 lbs/2 months for all of 2008.
4. Adopt the non-whiting limited entry trawl proposal Alternative 2 as presented under Agenda Item D.6 for all of 2008.
5. Increase chilipepper rockfish limits with small footrope trawl gear south of 40°10' N. lat. to 2,000 lbs/2 months.

6.

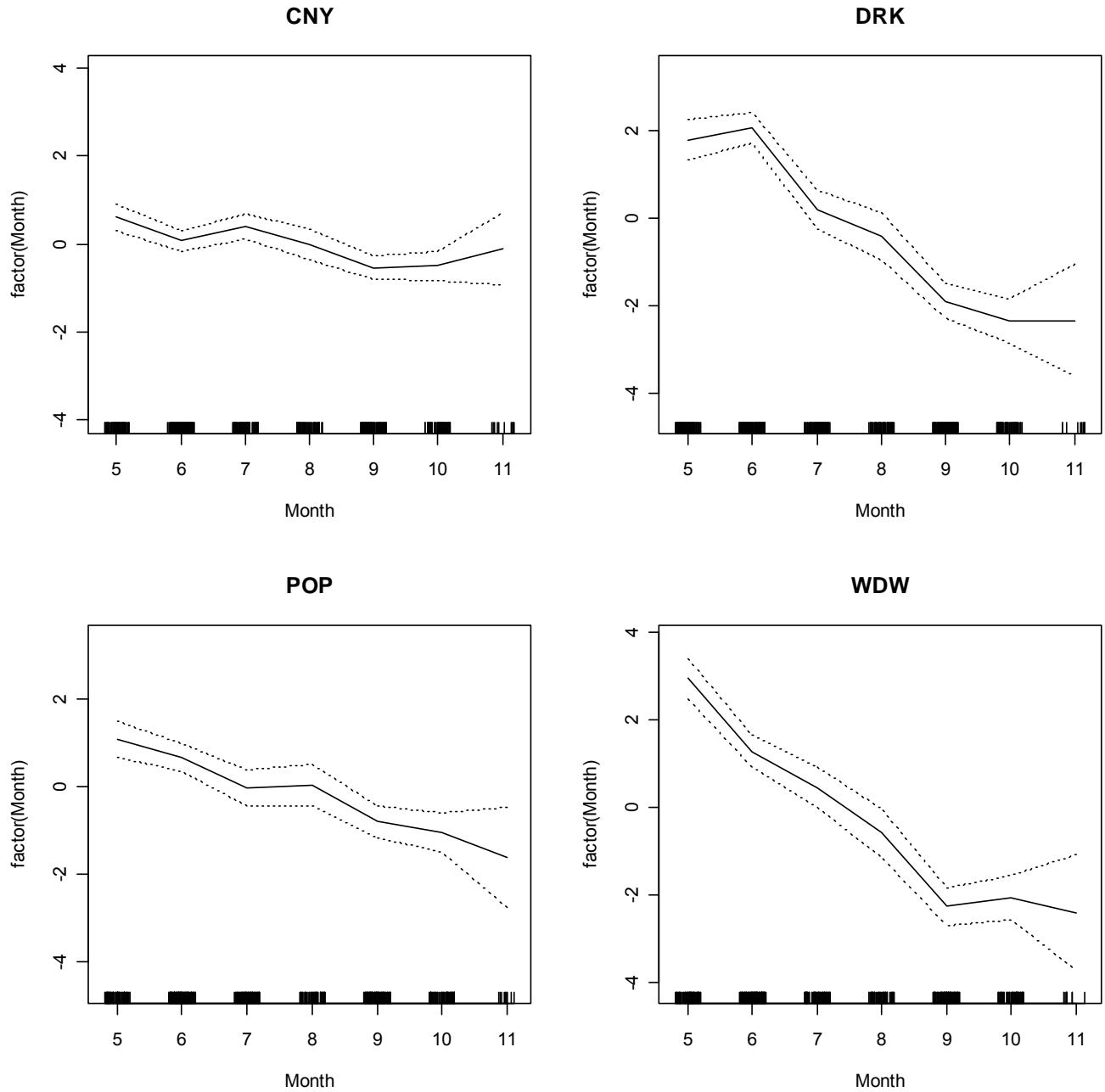


Figure 1. Catcher-processor data modeled. Dependent variable is log of daily aggregated bycatch weight divided by daily aggregated hake catch. The independent variable is month as a category. Y-axes contain relative coefficients. Note that the ranges on the y-axes are equal.

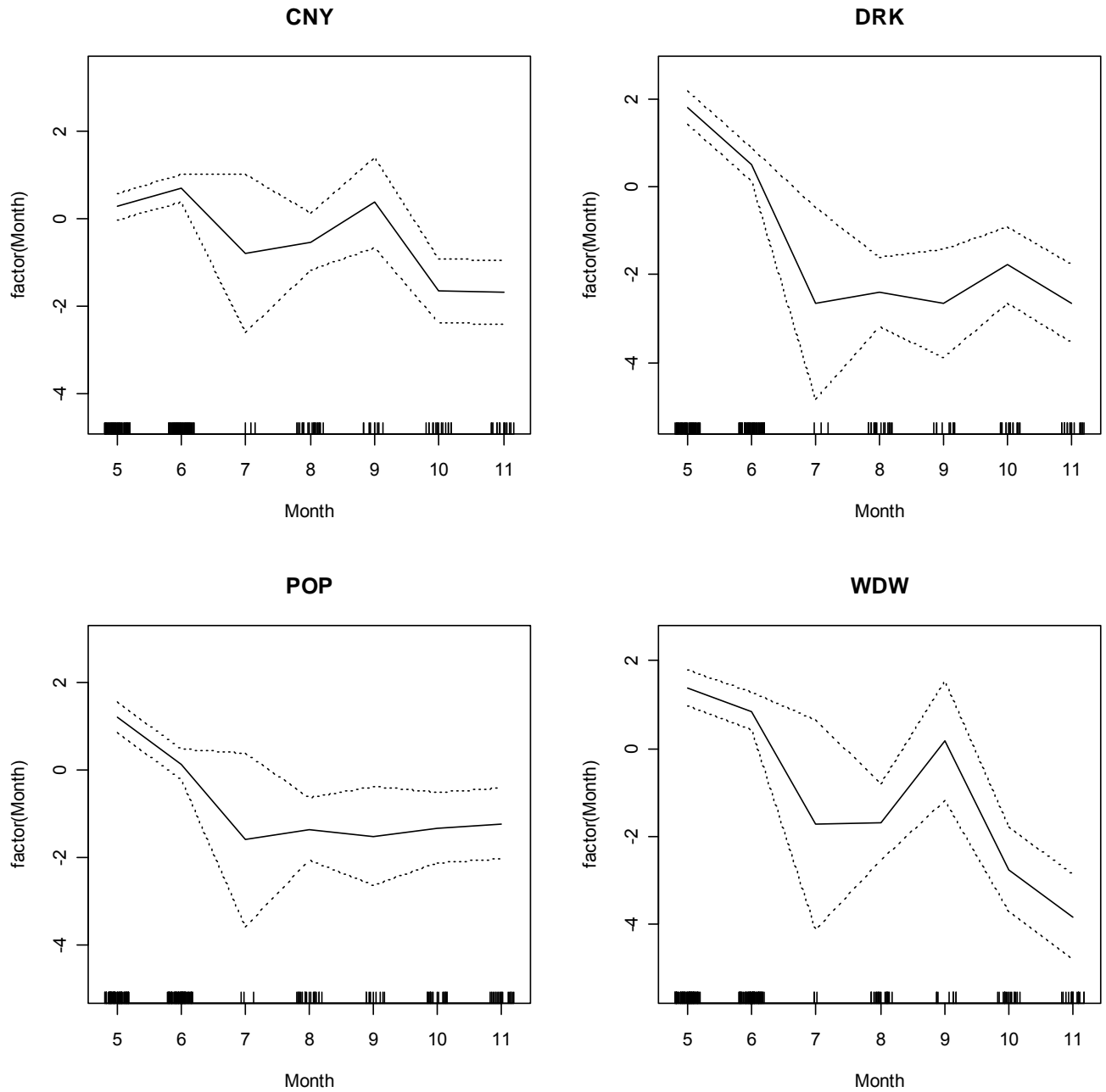


Figure 2. Mothership data modeled. Dependent variable is log of daily aggregated bycatch weight divided by daily aggregated hake catch. The independent variable is month as a category. Y-axes contain relative coefficients. Note that the ranges on the y-axes are equal.



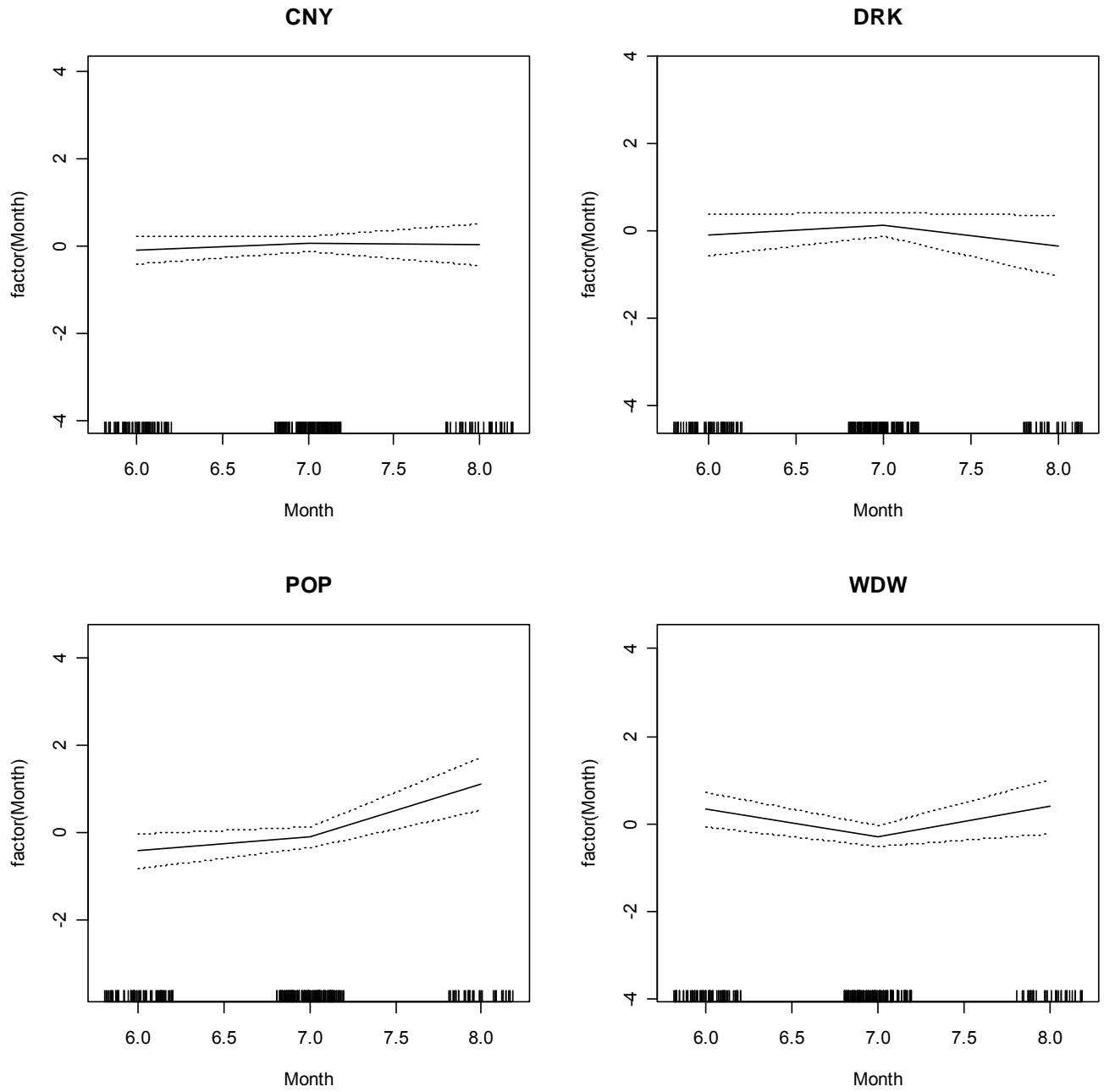


Figure 3. Shoreside data modeled. Dependent variable is log of daily aggregated bycatch weight divided by daily aggregated hake catch. The independent variable is month as a category. Y-axes contain relative coefficients. Note that the ranges on the y-axes are equal.

**2008 Projected mortality impacts (mt) of overfished groundfish species with LE non-whiting trawl  
Alternative 2, projected recreational impacts, preliminarily approved EFPS, and a Council recommended  
estimate of canary rockfish in research catches .**

11/06/07

Fishery	Bocaccio b/	Canary	Cowcod	Dkbl	POP	Widow	Yelloweye
<b>Limited Entry Trawl- Non-whiting</b>	11.5	<b>8.0</b>	1.4	209.1	80.9	6.6	0.5
<b>Limited Entry Trawl- Whiting</b>							
At-sea whiting motherships a/		4.7		25.0	1.9	<b>220.0</b>	0.0
At-sea whiting cat-proc a/			0.0				
Shoreside whiting a/			0.0				
Tribal whiting		0.7		0.0	0.6	6.1	0.0
<b>Tribal</b>							
Midwater Trawl		1.8		0.0	0.0	40.0	0.0
Bottom Trawl		0.8		0.0	3.7	0.0	0.0
Troll		0.5		0.0	0.0		0.0
Fixed gear		0.3		0.0	0.0	0.0	2.3
<b>Limited Entry Fixed Gear</b>		1.1		1.3	0.4		2.8
Sablefish	13.4		0.0			0.0	
Non-Sablefish			0.1			0.5	
<b>Open Access: Directed Groundfish</b>		1.0					
Sablefish DTL	0.0	0.2	0.1	0.2	0.1	0.0	0.3
Nearshore (North of 40°10' N. lat.)	0.0	1.7		0.0	0.0	0.5	1.5
Nearshore (South of 40°10' N. lat.)	0.0			0.0	0.0		
Other	10.6			0.0	0.0	0.0	0.1
<b>Open Access: Incidental Groundfish</b>							
CA Halibut	0.1	0.0		0.0	0.0		
CA Gillnet c/	0.5			0.0	0.0	0.0	
CA Sheephead c/				0.0	0.0	0.0	0.0
CPS- wetfish c/	0.3						
CPS- squid d/							
Dungeness crab c/	0.0		0.0	0.0	0.0		
HMS b/		0.0	0.0	0.0			
Pacific Halibut c/	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pink shrimp	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Ridgeback prawn	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Salmon troll	0.2	0.8	0.0	0.0	0.0	0.3	0.2
Sea Cucumber	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spot Prawn (trap)							
<b>Recreational Groundfish e/</b>							
WA		<b>5.7</b>					<b>6.2</b>
OR						<b>1.4</b>	
CA	<b>66.3</b>	<b>9.0</b>	<b>0.3</b>			<b>8.0</b>	<b>2.1</b>
Preliminary EFP	11.0	0.1	0.2	1.0		3.4	0.1
<b>Research: Includes NMFS trawl shelf-slope surveys, the IPHC halibut survey, and expected impacts from SRPs and LOAs. f/</b>							
	2.0	5.5	0.2	2.0	2.0	1.1	3.0
<b>TOTAL</b>	116.1	42.0	2.3	238.7	89.6	288.0	19.3
<b>2008 OY</b>	218	44.0	4.0	290	150	368	20
<b>Difference</b>	101.9	2.0	1.7	51.4	60.4	80.1	0.7
<b>Percent of OY</b>	53.3%	95.5%	57.5%	82.3%	59.8%	78.2%	96.3%
Key	= either not applicable; trace amount (<0.01 mt); or not reported in available						

a/ Non-tribal whiting numbers reflect bycatch limits for the non-tribal whiting sectors.

b/ South of 40°10' N. lat.

c/ Mortality estimates are not hard numbers; based on the GMT's best professional judgment.

d/ Bycatch amounts by species unavailable, but bocaccio occurred in 0.1% of all port samples and other rockfish in another 0.1% of all port samples (and squid fisheries usually land their whole catch).

e/ Values in scorecard represent projected impacts. However, harvest guidelines for 2008 are as follows: canary in WA and OR combined = 8.2 mt and in CA = 9.0 mt; yelloweye in WA and OR combined = 6.8 mt and in CA = 2.1 mt.

f/ Research projections updated November 2007.