

# Status of the Petrale sole stock off the U.S. West Coast in 2023



Ian G. Taylor<sup>1</sup>, Vladlena Gertseva<sup>1</sup> and Nick Tolimieri<sup>1</sup>

1. NOAA Fisheries Northwest Fisheries Science Center, 2725 Montlake Boulevard East



U.S. Department of Commerce  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Northwest Fisheries Science Center

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Please cite this publication as:

Taylor, I.G., V. Gertseva, N. Tolimieri. 2023. Status of the Petrale sole stock off the U.S. West Coast in 2023. NOAA Fisheries Science Center, Seattle, WA.

## 1 Executive Summary

### 1.1 Assessment Model

### 1.2 Reference Points, Stock Status, and Projections

## 2 Introduction

Testing adding in an introduction for Petrale sole. There is currently no read of parameters for child documents.

### 2.1 Management History

### 2.2 Fishery Descriptions

### 2.3 Ecosystem Considerations

### 3 Data

#### 3.1 Stock ID

#### 3.2 Life History

#### 3.3 Landings

#### 3.4 Indices and Standardization

#### 3.5 Composition Data

#### 3.6 Absolute Abundance

#### 3.7 Environmental/Ecosystem Indicator Data

## 4 Assessment

### 4.1 Current Modeling Approach

### 4.2 Configuration of the Base Model



### 4.3 Modeling Results

#### 4.3.1 Parameter Estimates

#### 4.3.2 Recruitment Estimates and Deviations

#### 4.3.3 Model Fits

#### 4.3.4 Model Diagnostics

#### 4.4 Sensitivity Analyses

#### 4.5 Management Benchmarks

#### 4.6 Projections

## 5 Discussion

Here is a use of an in-text reference to a key quantity such as target spawning biomass as 5.51571 kgs.

## 6 Acknowledgements

## 7 References

## 8 Tables

Table 1: indices\_cap

Year	Fleet 3		Fleet 4	
	Estimated CPUE	Uncertainty	Estimated CPUE	Uncertainty
1980	3,322.83	0.38		
1983	2,438.46	0.34		
1986	2,211.88	0.34		
1989	2,177.91	0.34		
1992	1,933.47	0.34		
1995	2,516.70	0.35		
1998	2,784.97	0.33		
2001	3,298.33	0.34		
2004	4,051.63	0.34	20,790.6	0.09
2003			19,373.7	0.09
2005			20,698.2	0.08
2006			19,167.6	0.08
2007			17,844.1	0.08
2008			17,074.9	0.08
2009			17,896.0	0.08
2010			22,500.5	0.07
2011			30,760.2	0.07
2012			40,647.6	0.07
2013			49,036.7	0.09
2014			54,277.9	0.07
2015			56,914.9	0.07
2016			57,499.3	0.07
2017			56,575.7	0.07
2018			54,735.8	0.08



Fleet 3			Fleet 4	
Year	Estimated CPUE	Uncertainty	Estimated CPUE	Uncertainty
2019			52,972.8	0.10
2021			49,724.9	0.07
2022			45,694.1	0.08

9 Figures

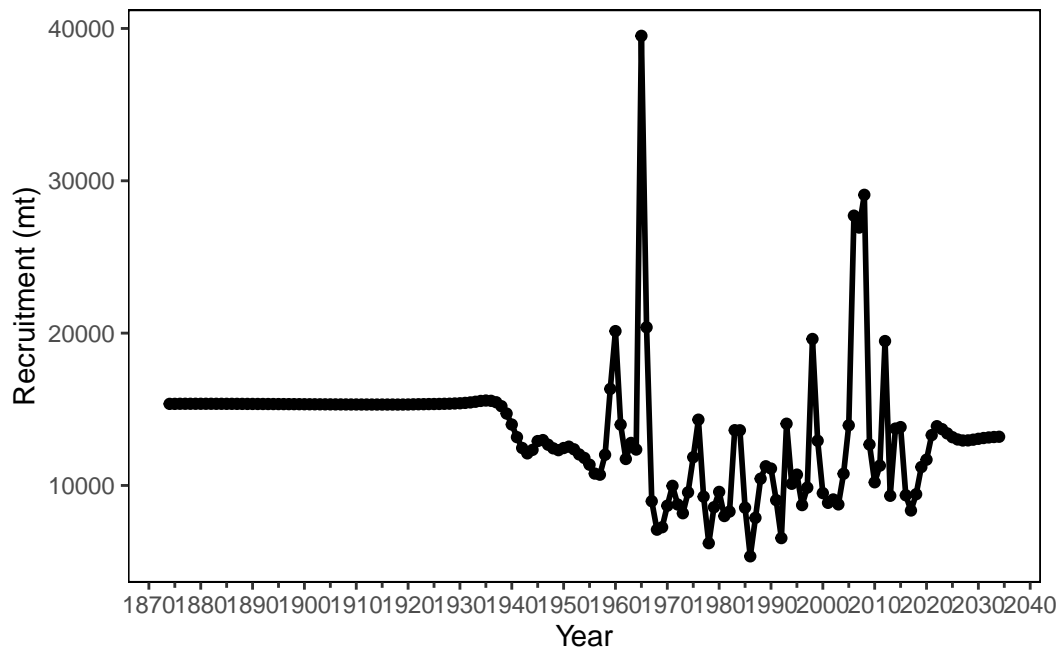


Figure 1: recruitment\_cap

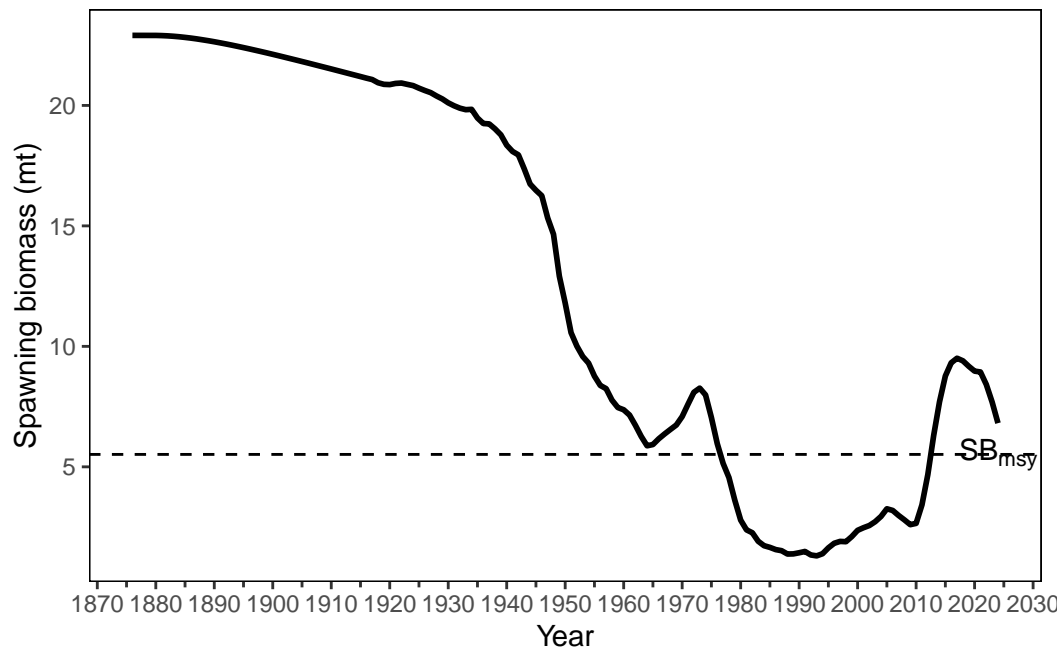


Figure 2: spawning\_biomass\_cap

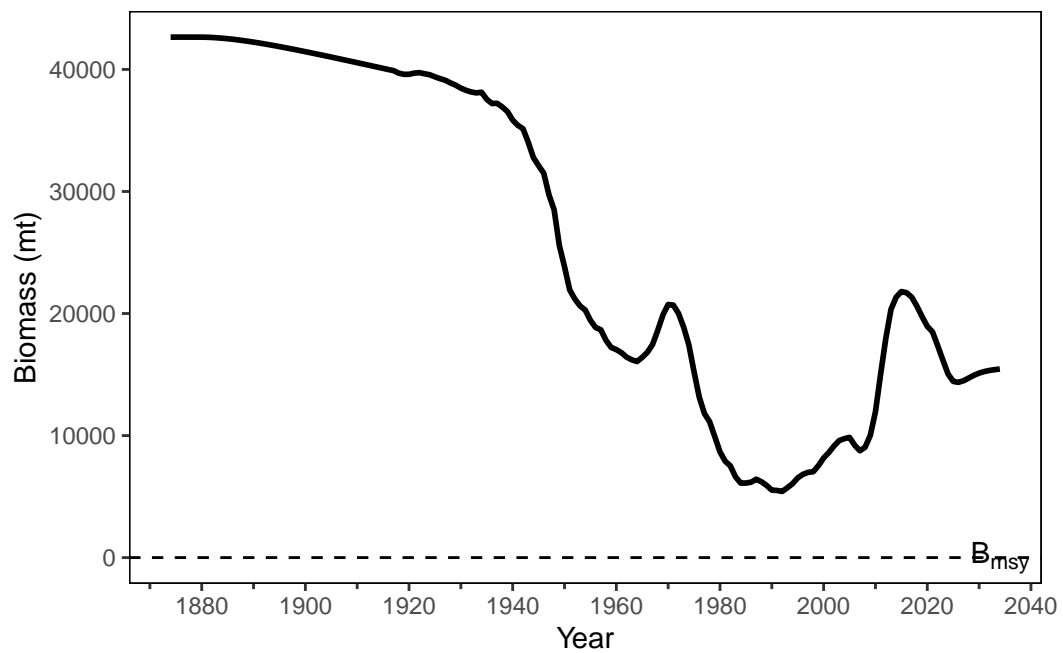


Figure 3: biomass\_cap

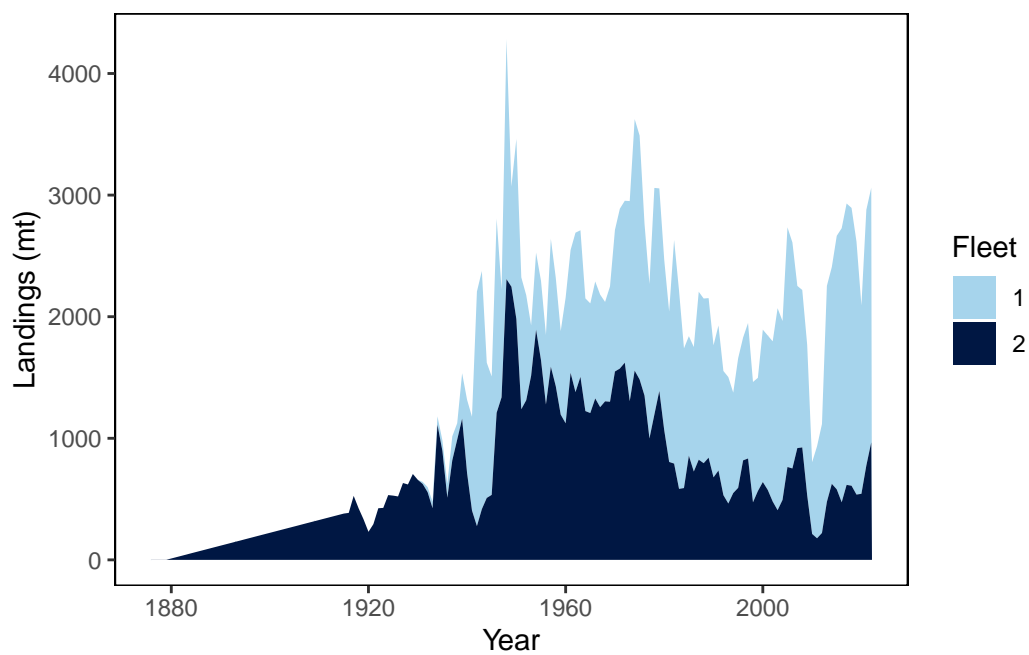


Figure 4: landings\_cap

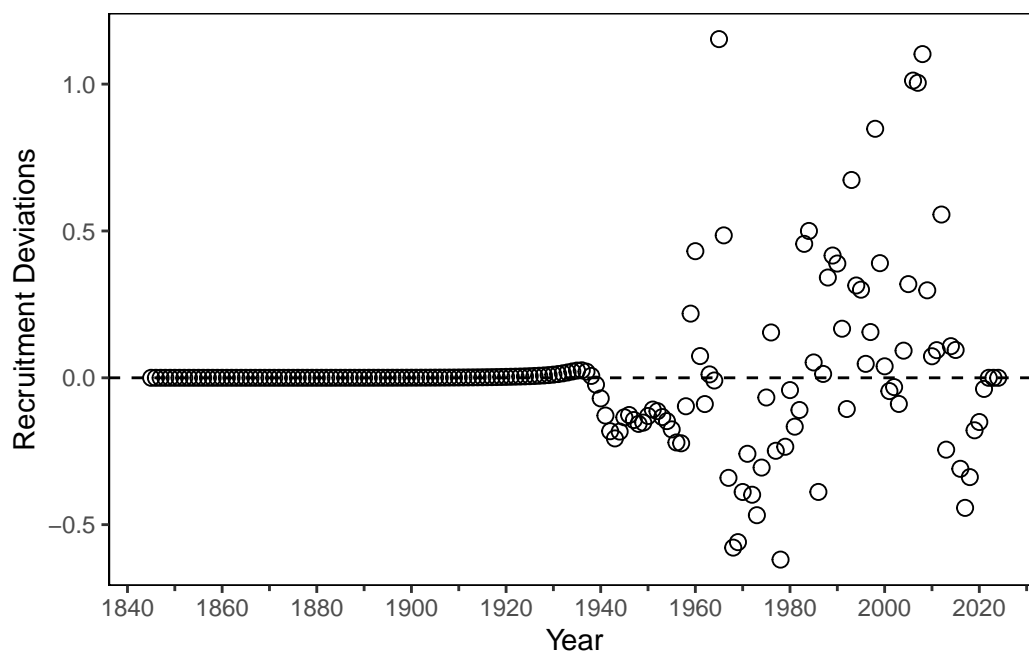


Figure 5: recruitment\_deviations\_cap

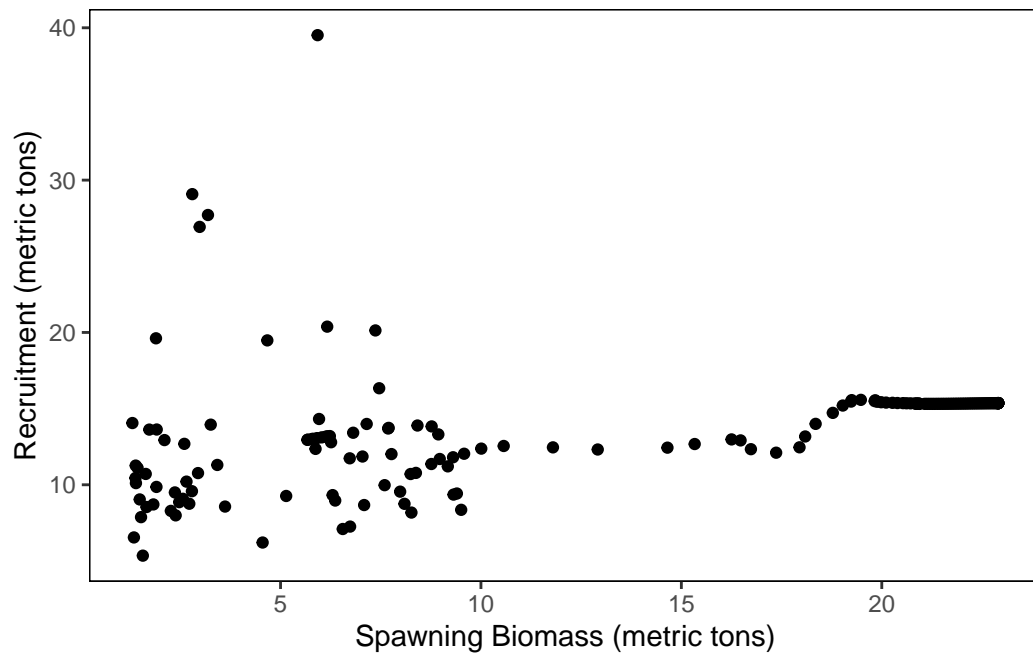


Figure 6: spawning\_recruitment\_cap

10 Notes

## 11 Appendices