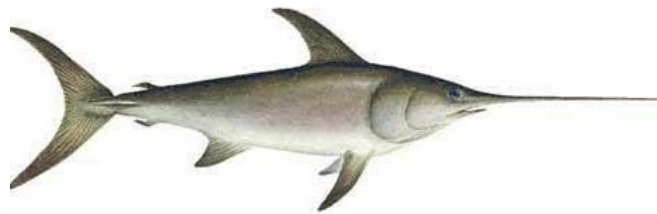




## The U.S. Longline Fishery for Striped Marlin in the North Pacific Ocean

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## INTRODUCTION

This report summarizes catch trends for striped marlin (*Tetrapturus audax*) caught by the US Hawaii-based longline fishery in the North Pacific Ocean. Although striped marlin are targeted and taken incidentally by a suite of commercial and recreational fisheries in the North Pacific Ocean (NPO), only the U.S. longline fishery is discussed herein. To facilitate completion of the upcoming ISC striped marlin stock assessment, which assumes two NPO stocks, the US longline catch time series have been separated accordingly into a Western Central Pacific Ocean (WCPO-NPO) and Eastern Pacific Ocean (EPO-NPO) stock.

## 1. FISHERY AND CATCHES

### Hawaii-based Longline Fishery

The Hawaii-based longline fishery has operated under a limited entry program since 1994. This program capped participation at 164 vessels, however, the number of active vessels has never reached this limit. Vessel participation ranged from 37 to 141 vessels over the past 23 years, with 127 vessels active in 2009.

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<sup>2</sup> PIFSC Working Paper

The number of sets and number of hooks show an increasing trend from 1994 (Figures 1 & 2). Although effort in the EPO-NPO increased during 2005-2009, more than 95% of the sets and hooks set were made in the WCPO-NPO. The recent increase of effort in the EPO-NPO is related to the bigeye tuna quota implemented by the Western-central Pacific Fisheries Commission (WCPFC). Two other important characteristics of this fishery are its geographic range and total annual hook deployment. The Hawaii-based longline fishery ranged from the equator to 40° N latitude and from 130° to 175° W longitude in 2009 4).

Annual Hawaii-based longline catches of striped marlin were slightly higher during 1991-1999 and varied substantially throughout 2000-2009 (Figure 3). Striped marlin catches in the WCPO-NPO represented 98% of the total Hawaii-based longline catch of striped marlin. The highest striped marlin catches were in the main Hawaiian Island Exclusive Economic Zone (EEZ) and southwest of the MHI EEZ (Figure 4).

Figure 1.—Number of sets by the Hawaii-based longline fishery in the North Pacific Ocean, 1991-2009.

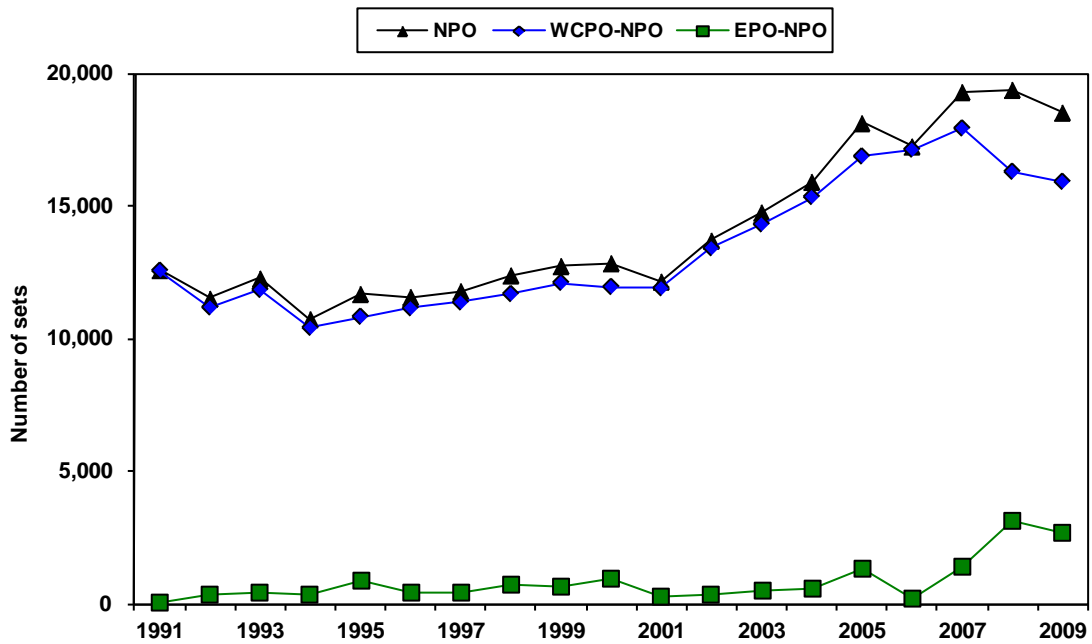


Figure 2.—Number of hooks set by the Hawaii-based longline fishery in the North Pacific Ocean, 1991-2009.

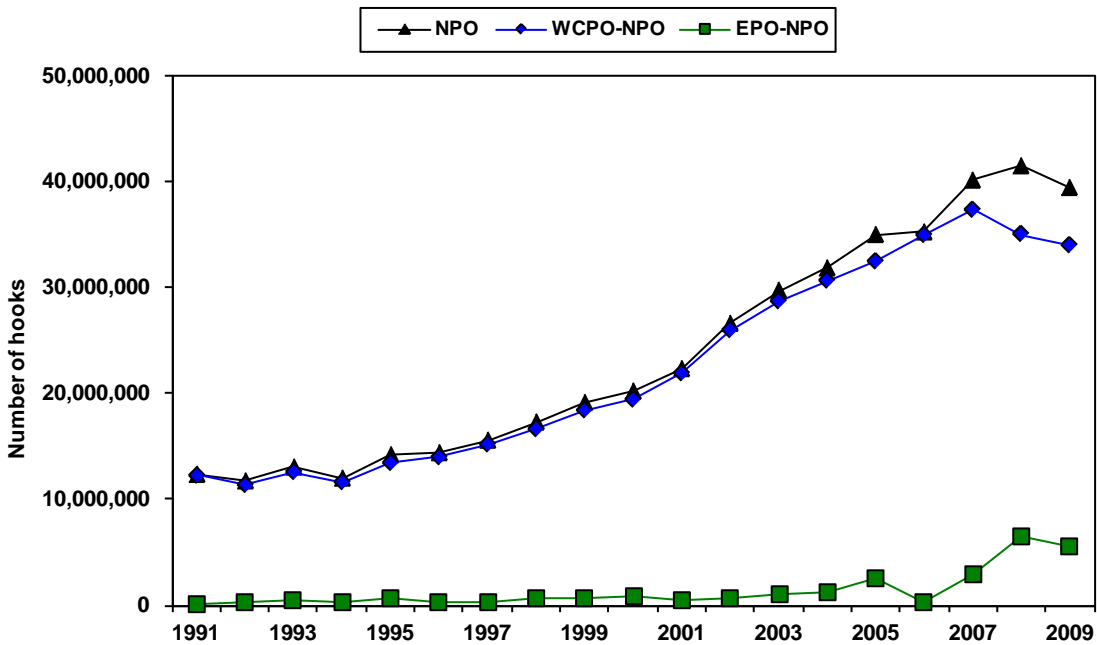


Figure 3.—Striped marlin catch by the Hawaii-based longline fishery in the North Pacific Ocean, 1991-2009.

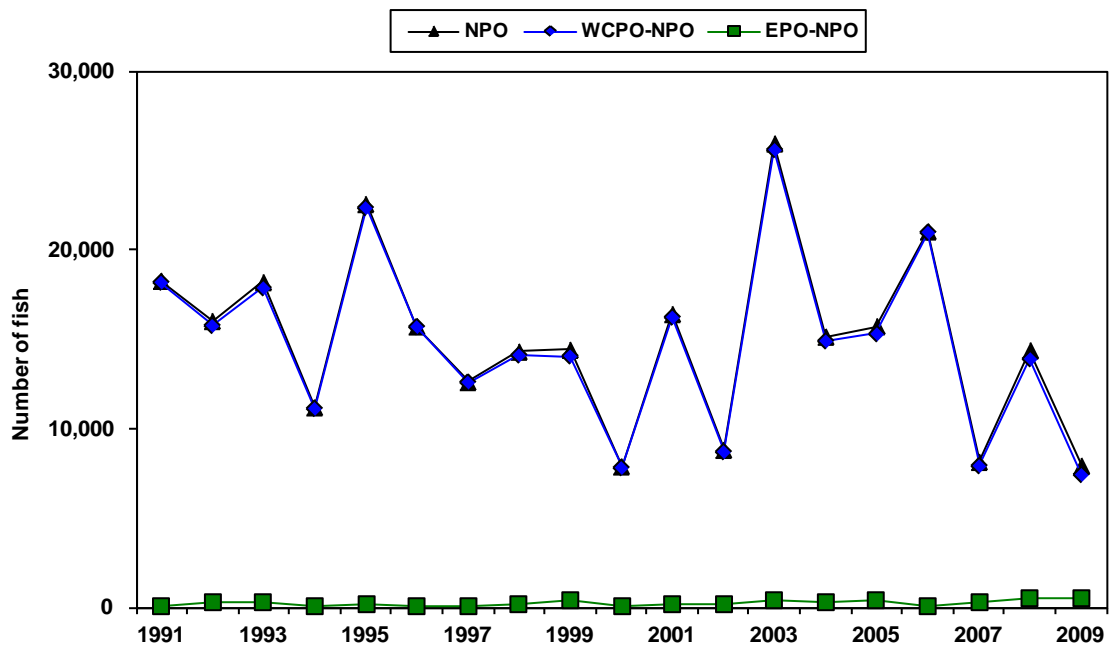


Figure 4.—Hawaii-based longline striped marlin catch (numbers of fish) by area, 2009.

