1.0 INTRODUCTION

This Stock Assessment and Fishery Evaluation (SAFE) Report was prepared by the New England Fishery Management Council's Skate Plan Development Team (PDT). It presents available biological and socioeconomic information for the northeast's region skate complex and its associated fisheries. This is the first Skate SAFE Report for the northeast region complex and serves as a source document for a Fishery Management Plan (FMP) for skates. The Skate FMP will include a Supplemental Environmental Impact Statement, which will expand and update (where possible) the information contained in this SAFE Report.

Table 1 presents the seven species in the northeast region's skate complex, including each species common name(s), scientific name, size at maturity, and general distribution.

Table 1 Skate Species Identification for Northeast Complex

SPECIES COMMON NAME	SPECIES SCIENTIFIC NAME	GENERAL DISTRIBUTION	SIZE AT MATURITY	OTHER COMMON NAMES
Winter Skate	Leucoraja ocellata	Inshore and offshore GB and SNE with lesser amounts in GOM or MA	Large (> 100 cm)	Big SkateSpotted SkateEyed Skate
Barndoor Skate	Dipturis laevis	Offshore GOM (Canadian waters), offshore GB and SNE (very few inshore or in MA region)	Large (> 100 cm)	
Thorny Skate	Amblyraja radiata	Inshore and offshore GOM, along the 100 fm edge of GB (very few in SNE or MA)	Large (> 100 cm)	Starry Skate
Smooth Skate	Malacoraja senta	Inshore and offshore GOM, along the 100 fm edge of GB (very few in SNE or MA)	Small (< 100 cm)	Smooth-tailed Skate Prickly Skate
Little Skate	Leucoraja erinacea	Inshore and offshore GB, SNE, and MA (very few in GOM)	Small (< 100 cm)	 Common Skate Summer Skate Hedgehog Skate Tobacco Box Skate
Clearnose Skate	Raja eglanteria	Inshore and offshore MA	Small (< 100 cm)	Brier Skate
Rosette Skate	Leucoraja garmani	Offshore MA	Small (< 100 cm)	Leopard Skate

Abbreviations are for Gulf of Maine (GOM), Georges Bank (GB), southern New England (SNE), and the Mid-Atlantic (MA) regions.

The seven species in the northeast region (Maine to Virginia) skate complex are distributed along the coast of the northeast United States from near the tide line to depths exceeding 700 m (383 fathoms). In the northeast region, the center of distribution for the little and winter skates is Georges Bank and Southern New England. The barndoor skate is most common in the Gulf of Maine, on Georges Bank, and in Southern New England. The thorny and smooth skates are commonly found in the Gulf of Maine. The clearnose and rosette skates have a more southern distribution, and are found primarily in Southern New England and the Chesapeake Bight. Skates are not known to undertake large-scale migrations, but they do move seasonally in response to changes in water temperature, moving offshore in summer and early autumn and returning inshore during winter and spring. Members of the skate family lay eggs that are enclosed in a hard, leathery case commonly called a mermaid's purse. Incubation time is six to twelve months, with the young having the adult form at the time of hatching (Bigelow and Schroeder 1953).

In March 2000, the National Marine Fisheries Service (NMFS) informed the New England Fishery Management Council (hereafter NEFMC, or Council) of its decision to designate the NEFMC as the responsible body for the development and management of the seven species eted at the 30th Northeast

Regional Stock Assessment Workshop (SAW 30), NMFS identified four species of skates as overfished: barndoor, smooth, thorny, and winter skate. (This SAFE Report updates the status determinations for each species from SAW 30 using more recent survey data.) The overfished status of these species necessitates development of management measures to end overfishing and rebuild these stocks in accordance with the Magnuson-Stevens Fishery Conservation and Management Act.

Subsequently, the Council adopted and implemented several management measures in other fisheries which have reduced fishing mortality and promoted the rebuilding of overfished skate stocks. These include, but are not limited to:

- Groundfish Framework 33, May 1, 2000: A large area closure on Georges Bank during May (Blocks 109-114, 98, and 99) and additional one-month groundfish area closures resulting from the trip limit "trigger" (Blocks 124, 125, and Cashes Ledge)
- Scallop Framework 11: An increase in twine top mesh for scallop vessels from six-inches to eight-inches (effective November 1999)
- Overall effort and mortality reductions resulting from ongoing management programs in several FMPs, including groundfish, scallops, and monkfish

In addition, at its January 23-25, 2001 meeting (following the publication of this SAFE Report), the Council may approve a request to NMFS for interim action to prohibit the possession of barndoor skates on all vessels fishing in federal waters. The Council wants to take a proactive approach to protecting this species prior to implementation of the Skate FMP.

Because the development of appropriate skate management measures depends greatly on management measures in other fisheries (see Section 5.1 for more discussion), the final Skate FMP will be submitted to NMFS approximately two months after the anticipated submission of (groundfish) Amendment 13.