



# U.S. FISH AND WILDLIFE SERVICE TRANSMITTAL SHEET

<b>PART</b> 103 ESM	<b>SUBJECT</b> Ecological Services Manual- Standards for the Development of Habitat Suitability Index Models	<b>RELEASE NUMBER</b> 1-81
<b>FOR FURTHER INFORMATION CONTACT</b> Division of Eco- logical Services, 343-5197		<b>DATE</b> APR 10 1981

## EXPLANATION OF MATERIAL TRANSMITTED:

Enclosed is the fifth release of the new Ecological Services Manual. It contains the following part:

103 ESM Standards for the Development of Habitat Suitability Index Models

This manual release is to be filed in your "Habitat Evaluation Procedures" binder.

Associate Director - Environment

## FILING INSTRUCTIONS

Remove: Nothing.

Insert New Material: 103 ESM should be inserted between 102 ESM and 104 ESM in the Habitat Evaluation Procedures binder.

Transmittal Memorandum: File behind the Transmittal Memorandum 4-80 at the back of the Habitat Evaluation Procedures binder.

**Standards for the Development of**

**Habitat Suitability Index Models**

**103 ESM**



Division of Ecological Services  
U.S. Fish and Wildlife Service  
Department of the Interior  
Washington, D.C.

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Preface

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The U.S. Fish and Wildlife Service (USFWS) has been developing a habitat-based evaluation methodology since 1974 entitled the Habitat Evaluation Procedures for use in impact assessment and project planning (USFWS 1980). This work has culminated in the development of three documents. The first document, entitled "Habitat as a Basis for Environmental Assessment" (101 ESM), addresses the rationale for a habitat-based technique and discusses the conceptual approach to habitat assessment.

The second document, entitled "Habitat Evaluation Procedures" (102 ESM), serves as a further refinement of the Habitat Evaluation Procedures (HEP) first developed in 1976. 102 ESM describes how the concepts outlined in 101 ESM can be implemented in a standardized procedure for conducting habitat evaluations in the field. HEP provides a quantification of wildlife habitat that is based on two primary variables: 1) the Habitat Suitability Index (HSI); and 2) the total area of available habitat.

This document, "Standards for the Development of Habitat Suitability Index Models for Use with the Habitat Evaluation Procedures" (103 ESM), is the third document and provides guidance for the development of models that provide HSI values.

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