

**THE NATURALIST'S GUIDE IN  
COLLECTING AND PRESERVING  
OBJECTS OF NATURAL HISTORY:  
WITH A COMPLETE CATALOGUE  
OF THE BIRDS OF MASSACHUSETTS**

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The naturalist's guide in collecting and preserving objects of natural history: with a complete catalogue of the birds of Massachusetts by C. J. Maynard

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**C. J. MAYNARD**

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# NATURALIST'S GUIDE

IN COLLECTING AND PRESERVING

OBJECTS OF NATURAL HISTORY,

WITH

A COMPLETE CATALOGUE OF THE BIRDS  
OF EASTERN MASSACHUSETTS.

By C. J. MAYNARD.

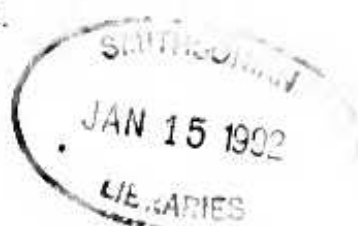
WITH ILLUSTRATIONS BY E. L. WEEKS.

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## INTRODUCTION.

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THE great need of a good illustrated work to guide young naturalists in collecting and preserving objects of natural history has induced me to prepare the present Manual. In this attempt I hope I have been in some degree successful. I have spared no pains to bring together, in a comprehensive form, the results of many years of experience in collecting and preserving objects of natural history, both for private cabinets and for scientific museums.

No popular work of this kind has before been published in America. Throughout the present work I have endeavored to encourage the young to engage in the ennobling study of Natural History, and to join the band of young naturalists so rapidly increasing in our land.

I trust the reader will not by any means keep the teachings of this book secret, as some taxidermists are wont to counsel, but spread it broadcast among those who would profit by the information I have herein attempted to convey. It is intended for the NATURALIST, whoever and wherever he may be; and as it comes from a colaborer in the common field, it will, perhaps, be well received.

All of Part First is original. In preparing objects of natural history I have in a great degree invented methods of my own, and have not given in this work a single one that I have not tested and proved equal to all others, if not superior. To avoid confusion, I have given only the method which experience has taught me to be the best.

In this connection my thanks are due to Mr. E. L. Weeks, whose excellent illustrations will be found to add greatly to the value of the work.

In Part Second I have thought proper to add a catalogue of the birds of Eastern Massachusetts, with notes, as tending to enable the collector to obtain the rarer species more readily, by specifying the localities and peculiar haunts in which they have been found by others. The critical notes may, perhaps, be perused with interest by the more experienced ornithologist.



# CONTENTS.

## PART I.

### CHAPTER I.

#### COLLECTING AND PRESERVING BIRDS.

Sect.		Page
I.	HOW TO COLLECT . . . . .	3
II.	HOW TO PREPARE SPECIMENS.—INSTRUMENTS, MATERIALS, ETC.	10
III.	MEASURING, SKINNING, AND PRESERVING BIRDS . . . . .	18
	MEASURING . . . . .	18
	SKINNING . . . . .	22
	DETERMINING THE SEX . . . . .	27
	CONTENTS OF STOMACH, ETC. . . . .	31
	EXCEPTIONS TO THE USUAL METHOD OF SKINNING . . . . .	31
	TABLE OF MEASUREMENTS . . . . .	32
IV.	MOUNTING SPECIMENS . . . . .	34
	MOUNTING FRESH BIRDS . . . . .	34
	MOUNTING DRIED SKINS . . . . .	40
	MOUNTING BIRDS WITH THE WINGS EXTENDED . . . . .	43

### CHAPTER II.

#### COLLECTING AND PRESERVING MAMMALS.

Sect.		Page
I.	COLLECTING . . . . .	43
II.	MEASURING MAMMALS . . . . .	45
	SKINNING . . . . .	46
	METHOD OF PREPARING A BOOK FOR MEASURING MAMMALS . . . . .	47
	TABLE OF MEASUREMENTS . . . . .	47
III.	MOUNTING MAMMALS . . . . .	50

### CHAPTER III.

#### COLLECTING AND PRESERVING INSECTS FOR THE CABINET.

BEETLES, OR COLEOPTERA . . . . .	55
BUGS, OR HEMIPTERA . . . . .	57
GRASSHOPPERS, CRICKETS, ETC., OR ORTHOPTERA . . . . .	58

MOTHS AND BUTTERFLIES, OR LEPIDOPTERA . . . . .	58
DRAGON-FLIES, ETC., OR NEUROPTERA . . . . .	60
BEEs, WASPS, ETC., OR HYMENOPTERA . . . . .	61
FLIES, MOSQUITOES, ETC., OR DIPTERA . . . . .	61

## CHAPTER IV.

## COLLECTING AND PRESERVING FISHES AND REPTILES.

<b>SECT.</b>	
I. FISHES . . . . .	63
II. REPTILES . . . . .	64

## CHAPTER V.

## MISCELLANEOUS COLLECTIONS.

<b>SECT.</b>	
I. CRUSTACEA . . . . .	69
COLLECTING MOLLUSKS . . . . .	69
PRESERVING SHELLS . . . . .	70
WORMS, ANIMAL PARASITES, JELLY-FISHES . . . . .	71
CORALS, SEA-ANEMONES, HYDROIDS AND BRYOZOA, STAR- FISHES, SEA-URCHINS, HOLOTHURAS, OR SEA-CUCUMBERS, SPONGES AND SEA-WEEDS . . . . .	72
II. PREPARING SKELETONS . . . . .	73
MOUNTING SKELETONS . . . . .	73

## CHAPTER VI.

COLLECTING AND PRESERVING EGGS . . . . .	78
METHOD OF PREPARING A BOOK FOR RECORDING THE MEASUR- MENTS OF EGGS . . . . .	78

## PART II.

CATALOGUE OF THE BIRDS OF EASTERN MASSACHUSETTS . . . . .	81
INTRODUCTION . . . . .	83
APPENDIX . . . . .	161
INDEX . . . . .	169

## LIST AND EXPLANATION OF PLATES.

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**FRONTISPIECE.** *Centronyx Bairdii*, Baird. — Baird's Sparrow, taken at Ipswich, Mass.

**PLATE I.\*** INSTRUMENTS used in preparing birds, etc., and for blowing eggs. *Fig. 1*, Common Pliers; *Fig. 2*, Cutting Pliers; *Fig. 3*, Tweezers; *Fig. 4*, Scalpel; *Figs. 5 and 6*, Egg-drills; *Fig. 7*, Blow-pipe; *Fig. 8*, Hook for removing embryos from eggs.

**PLATE II.** — WINGS, showing the positions of the different feathers, as follows: —

*Fig. 1.* *Wing of a Red-tailed Hawk* (*Buteo borealis*, Vieill.). — a indicates the primaries, or quills; b, secondaries; c, tertiaries; d, scapularies; g, greater wing-coverts; f, lesser wing-coverts; e, spurious wing, or quills.

*Fig. 2.* *Wing of a Coot, or Mud Hen* (*Fulica Americana*, Gmelin). — a indicates the primaries, or quills; b, secondaries; c, tertiaries; d, scapularies; e, spurious wing, or quills.

The tertiaries and scapularies are elongated in most of the aquatic birds, and in some of the Waders. They are *always prominent*, if not elongated, on long-winged birds, such as the Eagles, Hawks, Owls, Vultures, etc.; while they are only rudimentary on short-winged birds, such as the Thrushes, Warblers, Sparrows, etc.

**PLATE III.** HEAD OF THE BALD EAGLE (*Haliaeetus leucocephalus*, Savigny), showing the different parts, as follows: — a, the throat; b, chin; c, commissure, or the folding edges of the mandibles; d, under mandible; s, gonys; p, gape; g, upper mandible; h, culmen; i, tip; j, base of bill; k, cere (naked skin at the base of the upper mandible, prominent in the rapacious birds); l, frontal feathers; m, lores; n, crown; o, occiput.

\* Plates I., IV., V., VI., VIII., IX., X., and the frontispiece will be more fully explained hereafter.