Foreword to the 1995 Printing

J. Whitfield Gibbons

Archie Carr's *Handbook of Turtles* remains a classic. Following its publication in 1952, the book set the foundation and framework for the study of all aspects of the biology of turtles north of Mexico. No biologist interested in turtles was without a copy close at hand—and no turtle enthusiast should be without a copy today.

The *Handbook of Turtles* provides information on everything Archie Carr knew about the geographic range, distinguishing physical features, habitat, habits, reproductive traits, feeding, and perceived economic importance of all recognized species from the United States and Canada. From his own observations and those of others, Carr identified many pressing systematic and ecological problems.

Some biological mysteries, such as the increase of melanism in adult male *Trachemys scripta*, have yet to be explained fully (Lovich, McCoy, and Gartska, 1990). Carr's recognition that the genetic and ecological relationships within the *Pseudemys floridana (concinna)* complex offered "uncommon stimulation for the inquiring mind" has led to a spate of phylogenetic investigations (e.g., Crenshaw, 1965; Fahey, 1980; Ward, 1984; Seidel, 1994). And his history of diamondback terrapin exploitation remains one of the best chronicles of this still-beleaguered species.

When this book was first published, 38 species of turtles were known from North America outside of Mexico. Today, the most recent accounts recognize 55 native species, of which 34 have the same nomenclature as that used by Carr. Nomenclatural changes include eight elevations to the species level of variants recognized by Carr as subspecies, four changes in generic names based on phylogenetic interpretations, and eight species described since publication of the *Handbook of Turtles*. One addition results from a range extension of a primarily Mexican species, *Kinosternon hirtipes*, that Carr was unaware occurred in the United States. Two additional U.S. species, *Trionyx sinensis* and *T. steindachneri*, are now recognized as introductions from Asia that became naturalized in Hawaii following World War II. Because Hawaii was not a state until 1959, Carr did not include either species as part of the U.S. turtle fauna.

Yet, despite the biological knowledge gained from the many turtle studies conducted since 1952 and the resulting taxonomic changes, Carr's timeless perceptions and personal insights retain their value for the turtle biologist, as

do his discussions of the basic biology of turtles and the still-to-be-solved problems. And the *Handbook of Turtles* has another enduring feature. It showcases Archie Carr's talent as a writer and storyteller. Most of the species accounts are filled with absorbing personal observations and anecdotes that have direct application to the issue at hand. Carr frequently draws on excerpts from his field notes to provide a complete picture of the turtles he is describing. This narrative approach of the field naturalist has disappeared from most of today's scientific literature. In reading the *Handbook of Turtles*, one wishes that style would reappear, if we still have writer-naturalists like Archie Carr.

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The following table compares the currently recognized nomenclature (based on Ernst, Lovich, and Barbour, 1994) of turtle species of the United States (excluding Hawaii) and Canada with Carr's taxonomy. Describer and year are given for taxa described since 1952. "Undescribed in 1952" indicates that the species was not recognized as a distinctive taxonomic entity in the *Handbook of Turtles*.

Current use (different from Carr)	Current use (same as Carr)	Use by Carr
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Chelydridae
Chelydra serpentina
Macrolemys temminckii

Current use (different from Carr)	Current use (same as Carr)	Use by Carr
Kinosternidae		
	<i>Sternotherus carinatus</i>	
	<i>Sternotherus odoratus</i>	
<i>Sternotherus depressus</i> Tinkle and Webb, 1955		Undescribed in 1952
<i>Sternotherus minor</i>		<i>Sternotherus carinatus</i> <i>minor</i>
	<i>Kinosternon baurii</i>	
	<i>Kinosternon flavescens</i>	
	<i>Kinosternon sonoriense</i>	
	<i>Kinosternon subrubrum</i>	
<i>Kinosternon hirtipes</i>		Not known from USA
Emydidae		
	<i>Clemmys guttata</i>	
	<i>Clemmys insculpta</i>	
	<i>Clemmys marmorata</i>	
	<i>Clemmys muhlenbergii</i>	
<i>Emydoidea blandingii</i>		<i>Emys blandingii</i>
	<i>Terrapene carolina</i>	
	<i>Terrapene ornata</i>	
	<i>Malaclemys terrapin</i>	
	<i>Graptemys barbouri</i>	
	<i>Graptemys geographica</i>	
	<i>Graptemys oculifera</i>	
	<i>Graptemys pseudo-</i> <i>geographica</i>	
	<i>Graptemys pulchra</i>	
<i>Graptemys ernsti</i> Lovich and McCoy, 1992		Undescribed in 1952
<i>Graptemys gibbonsi</i> Lovich and McCoy, 1992		Undescribed in 1952
<i>Graptemys caglei</i> Haynes and McKown, 1974		Undescribed in 1952
<i>Graptemys ouachitensis</i> Cagle, 1953		Undescribed in 1952
<i>Graptemys kohnii</i>		<i>Graptemys pseudo-</i> <i>geographica kohnii</i>

Current use (different from Carr)	Current use (same as Carr)	Use by Carr
<i>Graptemys versa</i>		<i>Graptemys pseudogeographica versa</i>
<i>Graptemys nigrinoda</i> Cagle, 1954		Undescribed in 1952
<i>Graptemys flavimaculata</i> Cagle, 1954		Undescribed in 1952
	<i>Chrysemys picta</i>	
<i>Trachemys scripta</i>		<i>Pseudemys scripta</i>
<i>Trachemys gaigeae</i>		<i>Pseudemys scripta gaigeae</i>
	<i>Pseudemys rubriventris</i>	
	<i>Pseudemys nelsoni</i>	
	<i>Pseudemys floridana</i>	
<i>Pseudemys concinna</i>		<i>Pseudemys floridana concinna</i>
<i>Pseudemys gorzugi</i> Ward, 1984		Undescribed in 1952
<i>Pseudemys alabamensis</i>		<i>Pseudemys floridana mobiliensis</i>
<i>Pseudemys texana</i>		<i>Pseudemys floridana texana</i>
	<i>Deirochelys reticularia</i>	
	Testudinidae	
	<i>Gopherus agassizii</i>	
	<i>Gopherus berlandieri</i>	
	<i>Gopherus polyphemus</i>	
	Cheloniidae	
	<i>Chelonia mydas</i>	
	<i>Eretmochelys imbricata</i>	
	<i>Caretta caretta</i>	
	<i>Lepidochelys kempii</i>	
	<i>Lepidochelys olivacea</i>	
	Trionychidae	
<i>Trionyx ferox</i>		<i>Amyda ferox</i>
<i>Trionyx muticus</i>		<i>Amyda mutica</i>
<i>Trionyx spiniferus</i>		<i>Amyda ferox spinifera</i>
	Dermochelyidae	
	<i>Dermochelys coriacea</i>	