

NORTHEASTERN RECORDS OF *ARDEA HERODIAS WARDI* FROM THE SOUTHEASTERN UNITED STATES

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Postnesting dispersal, especially by immature Great Egret (*Casmerodius [Egretta] albus*) and Little Blue Heron (*Egretta coerulescens*) has been well documented (Palmer 1962). Long distance northward postnesting dispersal of the Great Blue Heron (*Ardea herodias*) has not been yet been demonstrated, probably because of the widespread presence of locally nesting birds and their young throughout the nesting season, and well into the winter months. I will here document the occurrence of the southeastern nesting population (*A. h. wardi*) during the late summer to midwinter in New York, New Jersey, Pennsylvania and Wisconsin.

TAXONOMY OF EASTERN POPULATIONS

Oberholser (1912) revised the species in his inimitable style, splitting it into 11 taxa (including the Great White Heron), 7 from continental North America. That classical revision was essentially followed by the American Ornithologists' Union Checklist (1957), by Palmer (1962) and most authors. Payne (1979), in contrast, recognized only two blue subspecies for continental North America. He wrote "Southern birds average larger than northern birds but eastern variation in size is clinal, and no subspecies need be recognized...except in Pacific northwest..." (*ibid* p.198). However, he neither measured specimens nor compared series (pers. comm.).

In fact, the nesting birds from Florida are strikingly larger than nesting birds in the northeast (Table 1), and are much paler in coloration. Because of the lack of adequate numbers of nesting season specimens from the mid-Atlantic states, the sharpness of the gradient between the large pale Florida birds and the smaller, darker northeastern birds can not be determined at present. However, the two populations are distinct in morphology, and in phenology and should not be combined under the same trinomial.

During the course of measuring essentially every nesting season specimen of Great Blue Heron in North American collections, to estimate on size variation by age, I measured 46 first year birds taken late summer to midwinter in the northeast. It was not feasible to develop a comparable data base for the Florida populations because of the nearly year-round presence there of at least some immature birds from the northeast; indeed, northeastern birds probably outnumber local birds in the winter. Immatures

from the mid-Atlantic states were not measured, as it would be impossible to determine their provenience.

Unfortunately the color differences found between adults of the two populations do not appear to be so well marked among first year birds. However, this may be an artifact of the lack of good, clean, recently prepared series of specimens from the two populations. In any case, color characters were not used in this study.

RESULTS

Of the 46 first year birds measured, I consider 38 to represent young of the northeastern nesting population (Table 1). Eight specimens had one or more measurements that are somewhat to dramatically larger. I consider these birds to represent *A. h. wardi* (Table 2).

Table 1. Measurements of adult, mostly nesting season, Great Blue Herons from the northeastern states (*A. h. herodias*) and from Florida (*A. h. wardi*), and of first year birds of the northeastern nesting population.

wing chord	culmen	tarsus	tail
FEMALES			
adult <i>herodias</i>			
431-480 (452.8) n=34, SD=9.2	124-145 (134.5) n=32, SD=5.0	150-175 (166.5) n=19, SD=7.3	161-188 (171.0) n=34, SD=6.0
immature <i>herodias</i>			
426-460 (442.4) n=30, SD=9.4	112-135 (124.6) n=31, SD=6.7	140-173 (159.6) n=25, SD=9.5	150-172 (164.4) n=31, SD=5.2
adult <i>wardi</i>			
452-501 (477.2) n=15, SD=14.7	134-157 (143.4) n=16, SD=6.3	181-225 (192.5) n=16, SD=11.5	169-194 (179.0) n=16, SD=6.3
MALES			
adult <i>herodias</i>			
431-480 (452.8) n=34, SD=9.2	124-145 (134.5) n=32, SD=5.0	150-175 (166.5) n=19, SD=7.3	161-188 (171.0) n=34, SD=6.0
immature <i>herodias</i>			
435-475 (459.4) n=27, SD=10.5	123-144 (132.7) n=28, SD=6.1	157-181 (173.5) n=22, SD=7.1	160-180 (169.2) n=27, SD=5.7
adult <i>wardi</i>			
452-501 (477.2) n=15, SD=14.7	134-157 (143.4) n=16, SD=6.3	181-225 (192.5) n=16, SD=11.5	169-194 (179.0) n=16, SD=6.3

Table 2. Data and measurements of northeastern specimens identified as *A. h. wardi*. Measurements more than one standard deviation larger than the maximum respective measurement for immature *A. h. herodias* are in **boldface**. Measurements greater than the maximal respective measurements of immature *A. h. herodias* are *italicized*.

Specimen	Location	Wing	Culmen	Tarsus	Tail
MALES					
WHFowler 1316	Pennsylvania: Philadelphia Co. Holmesburg 28 July 1897	<i>"480"</i>	<i>"141"</i>	<i>"205"</i>	???
AMNH 349623	New York; Suffolk Co. Shelter Is. 14 September 1901	470	153	185	163
CMNH 131390	Pennsylvania: Venango Co; 28 September 1947	465	142	193	165
AMNH 826431	New Jersey: Morris Co., Morristown 5 January 1989	465	139	184	184
FEMALES					
FMNH 52392	Wisconsin: Dodge Co. Beaver Dam 20 September 1990	475	138	180	170
CMNH 10143	Pennsylvania: Crawford Co. 9 August 1902	<i>467,470</i>	135	182	172
AMNH 308482	New York: Queens Co. Woodmere 14 October 1944	445±	137	175	169
AMNH 19610 (skeleton)	New Jersey: Passaic Co. Hewett 22 August 1990	457	133	184	173

Museum acronyms:

AMNH — American Museum of Natural History, New York

CMNH — Carnegie Museum of Natural History, Pittsburgh

FMNH — Field Museum of Natural History, Chicago

WHFowler - Private collection, measurements from Oberholser (1912); present location unknown.

It should be noted that several immature male "*herodias*" had tarsal measurements larger than the maximum for adult male *herodias*! I do not believe this is a problem relating to measurement changes due to immaturity, as all young females had measurements within the range or smaller than those of adults. I expect some of the young males with larger tarsal measurements probably also represent young *wardi*. However, none of the other measurements of those individuals was notably large, and the conservative approach is to classify them as *herodias*.

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