## Critique of Early Reports of Snowy Owls (*Bubo scandiacus*) from the Carolinas: 1737 to 1872

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The Snowy Owl (*Bubo scandiacus*) is a circumpolar resident of North America and Eurasia. Individual birds migrate south into the northern tier of states during the winter months, occasionally in large numbers and sporadically ranging into the southeastern US. The recent influx during the winter of 2013-2014 was one of the largest irruptions on record in the United States, with at least twenty individuals recorded in the Carolinas (Don Seriff, pers. comm.; Southern 2014).

Snowy owl reports associated with the Carolinas date back to the 1700s, but at least five of these have escaped notice or critical scrutiny in the modern ornithological literature. None of the five reports were mentioned by late 19<sup>th</sup> century compilations, such as Atkinson (1887) or Smithwick (1897). Twentieth century publications on the Carolinas, including Pearson et al. (1919, 1942, 1959), Wayne (1909), and Sprunt and Chamberlain (1949, 1970), gave no notice of these particular records. A critical review of the five accounts reveals interesting examples of muddled plagiarism (Brickell 1737), insufficient detail (Bartram, 1791; Curtis, ca 1867), questionable identification (Pennant 1795) and adequate documentation (Kiger 1872).

The earliest account is from John Brickell, whose *Natural History of North-Carolina* (1737) lists four types of owl as occurring in the state (Fig. 1) Given his long recognized propensity for plagiarism, Brickell's report should be examined for originality as much as for accuracy (Sparks 1826; Adams 1962; Lefler 1967; Simpson and Simpson 1977). Much of the content in his *Natural History* was appropriated, entirely without acknowledgment, from John Lawson's *A New Voyage to Carolina* (1709) (Fig. 2). The text of Brickell's "White" owl was indeed taken largely from Lawson's "Brown Owl", but the portion of Brickell's account that clearly describes a Snowy Owl was a nearly unaltered transcription from one of Rev. John Clayton's five letters to the Royal Society of London.

Clayton served as rector of James City Parish at Jamestown VA in 1684-86, and, upon his return to England, presented his observations on the natural and human history of tidewater Virginia in a series of reports ("letters") that were subsequently published in the *Philosophical Transactions*. (Berkeley and Berkeley 1965). As with so many of his thefts from Lawson's *New Voyage*, Brickell lifted the text from Clayton (1693) almost verbatim, yet with his typical minor rearrangements, probably in an attempt to obscure the theft (Simpson and Simpson 1977). The striking parallel constructions and wording of the two passages leave no doubt as to the origin of the text.



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Figure 1. Brickell's Natural History of North-Carolina (1737)

Clayton (1693) observed that:

"the white Owl is a very delicate feather'd bird, all the Feathers upon her Breast and Back being snow-white, and tipped with a Punctal of Jet-black."

Brickell incorporated the Clayton text into his Natural History (1737):

"It is a delicate Feathered Bird, all the Feathers upon the Back and Breast being Snow-white, and tiped (*sic*) with a punctal of Jet-black."

In his review of Brickell's records, McAtee (1956) took note of the White Owl report and mentioned the debt to Lawson but without thoroughly accounting for the source of the additional material: "His white owl is a mixture of the Snowy Owl and of that described by Lawson, with the Great Horned Owl in mind, but not identifiable from his remarks." McAtee did not comment about the possible validity of this account, and Pearson et al. (1919), who devoted an entire page to Brickell, did not mention his Snowy report. McAtee attributed Brickell's blunder to merging two different species accounts from Lawson, but Brickell's use of Clayton had not been discovered at the time McAtee reviewed the Brickell-Lawson connection.



Figure 2. Lawson's A New Voyage to Carolina (1709)

Typical of most text in Brickell's *Natural History*, it is impossible to conclude whether a given passage was merely plagiarized from an undisclosed author or whether Brickell was reporting from direct experience but using another writer's text to describe his own observation. Clayton's description of the Snowy's plumage is both simple and eloquent, succinctly conveying the essential features of the owl's appearance. Brickell might have chosen this passage to describe a species that he had personally encountered, but more likely he assumed that an owl reported by Clayton from nearby tidewater Virginia could be expected in North Carolina. Given the circumstances, however, the account in the *Natural History of North Carolina* should not be considered as acceptable primary documentation of the species' occurrence in North Carolina.

William Bartram's inclusion of the Snowy Owl in his classic *Travels* (1791) is uncharacteristically terse, consisting only of a single line entry in a table that lists species, each indicated with one of four different symbols to designate the particular species' status. The Snowy is given as "Strix arcticus, capite levi, corpore toto niveo; the great white owl", which is tagged as one of a number of species that "arrive in Pennsylvania in the autumn, from the

North, where they continue during the winter, and return again the spring following, I suppose to breed and rear their young; and these kinds continue their journies (*sic*) as far as South Carolina and Florida"

Subsequent authors repeated Bartram's status description and account nearly verbatim, as with John Latham in his *General History of Birds* (1795) and *Supplement II of the General Synopsis of Birds*, (1801), or only in passing, as by Baird et al. in *History of North American Birds* (1874). Twentieth century works refer to Bartram but without including his Snowy Owl information. Wayne (1910) cited Bartram's *Travels* but did not mention the Snowy Owl entry. Sprunt and Chamberlain (1949, 1970) noted Bartram as having done "considerable work in Carolina" but ignored his data on the Snowy Owl in their discussion of the species. Pearson et al. (1919) briefly discussed Bartram in their introductory material but omitted any records from the *Travels*, taking note that he did not provide specific information on the "animal life" of North Carolina from his brief transit through the state.

No conclusive evidence has been traced to reveal the extent to which Bartram's report was based on his own observations or on information provided to him by colleagues. If the latter situation explains why Bartram included the Snowy Owl in his *Travels* for South Carolina, then his possible source may have been Dr. Alexander Garden of Charleston. (Denny 1948; Berkeley and Berkeley 1965; Simpson 1999, 2004a, 2004b; Withers 2004; Finger 2010). Bartram and his father John Bartram were friends of Garden and visited him during sojourns in Charleston. One circumstantial thread possibly linking the Bartram report to Garden begins with the latter's material on the Snowy Owl as noted by Thomas Nuttall in his *Manual of the Ornithology of the United States and of Canada. The Land Birds* (1832, 1844). Nuttall cited Alexander Garden as reporting the species from South Carolina:

"In South Carolina, Dr. Garden saw them occasionally, and they were, in this mild region, observed to hide themselves during the day in the Palmetto groves of the sea-coast, and only sallied out towards night in quest of their prey".

Evidently Nuttall had discovered and was paraphrasing information that Garden had provided to Thomas Pennant, who included the comments in both the 1785 and 1792 editions of his *Arctic Zoology*. Pennant initially reported this information in 1785 merely as a terse footnote on p. 580, almost the end of volume II, more than 300 pages after his text account of the Snowy Owl. This suggests that Pennant had obtained Garden's information sometime after type had been set for the full species accounts and that he was thus compelled to insert the note as an unplanned addendum where sufficient space remained at the bottom of a page. Pennant (1785) commented only that Dr. Garden of Charles-town had "informed me, that the Snowy Owl …is frequent near the shores of South Carolina, among the Palmetto trees."

Pennant subsequently expanded the details of Garden's report in the

new edition of the *Arctic Zoology* (1792). The "Palmetto trees" mentioned by Pennant are almost certainly cabbage palmettos (*Sabal palmetto*) (John B. Nelson and Herrick Brown, pers. comm.).

"It is rare in the temperate parts of America, and seldom strays as low as Pensylvania (*sic*) or Louisiana, yet has been frequently seen by Doctor Garden, in the sultry climate of South Carolina, among the groves of Palmetto trees, or the *Chamerops humilis*\*, which line the shores from the Cape of Florida quite to Charlestown. There they lurk during day, and sally out in quest of prey during night."

Regardless of the circumstances, Pennant's account of Snowy Owls in South Carolina is so inconsistent for what is known about the species that the report should probably be discounted. Garden may have been confused or Pennant may have misinterpreted what he had been told, perhaps mixing the account with that for another bird. The commentary may represent a mistake by Garden or Pennant for Barn Owl (*Tyto alba*), which was also sometimes known as the Great White Owl at the time of these publications.

The fourth report is found in an unfinished manuscript by Moses Ashley Curtis, who gave a single line entry for the species in his "Birds of N. Carolina", which was probably intended as the outline for a more detailed ornithology of the state. Curtis apparently completed descriptive accounts for only a few of the more than 260 species in his manuscript, and the Snowy Owl text has not been found among those drafts. Curtis intended to have the book published by the North Carolina Geological Survey, which had printed his renowned *Botany* of North Carolina (Curtis 1867). In the economic retrenchment following the Civil War, the Survey declined to publish the ornithology. Curtis apparently ceased work on the project, and the surviving manuscript fragments do not contain information on the Snowy Owl or on the criteria used by Curtis to select species for inclusion on the list (Simpson and Simpson 1983).

The last of the five reports was announced, not in the scientific literature, but in the *People's Press*, Salem, NC, on Jan 18, 1872:

"Mr. Alex. Kiger, of Clemmonsville, succeeded in catching a WHITE OR SNOWY OWL, a rare bird in this region. It is full grown, wings measuring from tip to tip about 4 feet. The average length of wings, according to naturalists, is about 4 feet 6 inches. There is but little known here respecting the white owl, which is at home in the higher latitudes – Canada and British America. This owl is said to hunt in the day as well as at night. In flight, though noiseless, is swift firm and protracted. It is seldom caught, being very sagacious. The owl has been purchased and is on exhibition at the Museum. Admittance ten cents" (Fig. 3).

The commentary that the wingspread of this species was "according to naturalists ... about 4 feet 6 inches" and that the owl was "said to hunt in the day as well as at night" indicates that the writer of the *People's Press* report had access to one of the available contemporary reference books on birds.

A CURIOSITY.—Mr. Alex. Kiger, of Clemmonsville, succeeded in catching a WHITE or SNOWY OWL, a rare bird in this region. It is full grown, wings measuring from tip to tip about 4 feet. The average length of wings, according to natural ists, is about 4 feet 6 inches. There is but little known here respecting the white owl, which is at home in the higher latitudes —Canada and British America. This owl is said to hunt in the day.

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Figure 3. People's Press, Salem, NC January 18, 1872.

Reasonable candidates would be Nuttall's *Manual* (1832, 1840) and Brewer's (1840) edition of *Wilson's American Ornithology*.

Further information was provided on Saturday January 20 indicating that the owl was still alive and had indeed been acquired for the Museum, the Young Men's Missionary Society Museum, additionally taking note of a particularly cold winter (Crews and Bailey 2006):

"A large white owl has been purchased by the Society for the Museum, and is on exhibition there, still living. It is a very rare bird in these parts. Its being so far south may perhaps be recorded as one sign of the unusually severe winter. The past week has been a cold one again. On Friday ice was hauled again, about 2 in. thick."

Continued evidence of the cold weather was noted for nearly two weeks after the owl was first reported, as transcribed from Moravian records by Crews and Bailey (2006): Wednesday Jan 31: "Still cold (about 16° above zero at 7 or 8 A.M.) There has not been such thick ice for years. It is reported from 3 to 6 inches." Friday Feb 2: "It began to snow, and continued during the rest of the day and through the night, with high winds, sleet ... This is the deepest snow of the winter with us." Saturday Feb 3: "This morning it was still snowing until about 10 A.M."

The eventual fate of the owl has not been determined, but the most likely outcome would be death while in captivity. Whether the bird was preserved as a mounted display, collection specimen, or donation elsewhere has not been traced, although a thorough review of the reports and manuscript documents in the Salem Archives might reveal such information (Rauschenberg 1995).

The report of Kiger's owl is more detailed than the entries by Bartram or Curtis, more convincing than the Garden-Pennant account, and certainly more credible than Brickell's multi-source plagiarism. As such the Kiger report should be considered a valid record of the species for North Carolina. The other accounts should not be regarded as acceptable documentation for the species in the Carolinas.

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## Literature Cited

- Adams, P. G. 1962. Travelers and Travel Liars. University of California Press. Berkeley.
- Atkinson, G. F. 1887. Preliminary Catalogue of the Birds of North Carolina. Journal of the Elisha Mitchell Scientific Society, vol. 4, no. II: 44-87.
- Baird, S. F., T. M. Brewer, and R. Ridgway. 1874. A History of North American Birds. Land Birds. Volume III. Little, Brown and Company, Boston.
- Bartram, W. 1791. Travels through North and South Carolina, Georgia, East & West Florida. James and Johnson, Philadelphia.
- Berkeley, E. and D. S. Berkeley. 1965. The Reverend John Clayton. A Parson with a Scientific Mind. University Press of Virginia. Charlottesville.
- Berkeley, E. and D. S. Berkeley. 1969. Dr. Alexander Garden of Charles Town. The University of North Carolina Press. Chapel Hill.
- Brewer, T. M. 1840. Wilson's American Ornithology. Otis, Broaders, and Company. Boston.
- Brickell, J. 1737. The Natural History of North-Carolina. Dublin.
- Clayton, J. 1693. Mr. John Clayton, Rector of Crofton at Wakefield, his Letter to the Royal Society giving a farther Account of the Soil, and other Observables of Virginia. Philosophical Transactions, 17: 970-999.
- Crews, C. D. and L. D. Bailey. 2006. Records of the Moravians in North Carolina, vol. 13. 1867-1876. Office of Archives and History. Raleigh.
- Curtis, M. A. 1867. Geological and Natural History Survey of North Carolina.

Part III. Botany; containing a Catalogue of the Indigenous and Naturalized Plants of the State. Raleigh.

- Denny, M. 1948. Linnaeus and his Disciple in Carolina: Alexander Garden. Isis 38: 161-174.
- Finger, S. 2010. Dr. Alexander Garden, a Linnaean in Colonial America, and the Saga of five "electric eels". Perspectives in Biology and Medicine 53:388-406.
- Latham, J. 1801. Supplement II to the General Synopsis of Birds. Leigh, Sotheby & Son. London.
- Latham, J. 1821. General History of Birds Vol. I. Jacob and Johnson. Winchester.
- Lawson, J. 1709. A New Voyage to Carolina. London.
- Lefler, H. T. (editor). 1967. A New Voyage to Carolina by John Lawson. The University of North Carolina Press. Chapel Hill.
- McAtee, W. L. 1956. Additional Carolina Birds in Brickell's. Chat 20: 27-28.
- McAtee, W. L. 1963. The North American Birds of Thomas Pennant. Journal of the Society for the Bibliography of Natural History. 4: 100-124.
- Nuttall, T. 1832. Manual of the Ornithology of the United States and of Canada. The Land Birds. Hilliard and Brown. Cambridge.
- Nuttall, T. 1840. Manual of the Ornithology of the United States and of Canada. The Land Birds. Hilliard, Gray, and Company. Boston.
- Pearson, T. G., C. S. Brimley, and H. H. Brimley. 1919. The Birds of North Carolina. Raleigh.
- Pearson, T. G., C. S. Brimley, and H. H. Brimley. 1942. The Birds of North Carolina. Raleigh.
- Pearson, T. G., C. S. Brimley, and H. H. Brimley. Revised by D. L. Wray and H. T. Davis. 1959. The Birds of North Carolina. Raleigh.
- Rauschenberg, B. L. 1995. The Wachovia Historical Society 1895-1995. Wachovia Historical Society. Winston Salem.
- Simpson, M.B. and S. W. Simpson. 1977. The Reverend John Clayton's Letters to the Royal Society of London, 1693-1694: An Important Source for Dr. John Brickell's Natural History of North-Carolina, 1737. North Carolina Historical Review 54: 1-18.
- Simpson, M. B. and S. W. Simpson. 1983. Moses Ashley Curtis (1808-1872): Contributions to Carolina Ornithology. North Carolina Historical Review 60: 137-170.
- Simpson, M. B. Jr. 1999. Alexander Garden. American National Biography 8:691-692. Oxford University Press. New York.
- Simpson, M. B. Jr. 2004a. William Bartram. Oxford Dictionary of National Biography. 4:217-219. Oxford University Press. Oxford.
- Simpson, M.B. Jr. 2004b. Alexander Garden. Oxford Dictionary of National Biography. 21:404-405. Oxford University Press. Oxford.
- Smithwick, J. W. P. 1897. Ornithology of North Carolina. N. C. Experimental

Station Bulletin, no 144. North Carolina Agricultural Experiment Station. Raleigh.

Southern, J. 2014. Briefs for the files. Chat 78: 71-72.

- Sparks, J. 1826. Materials for American History. North American Review 23 (53): 275-294.
- Sprunt, A. and Chamberlain, E. B. 1949. South Carolina Bird Life. University of South Carolina Press. Columbia.
- Sprunt, A. and Chamberlain, E. B. 1970. South Carolina Bird Life. University of South Carolina Press. Columbia.
- Wayne, A. 1910. South Carolina Bird Life. Charleston Museum. Charleston.
- Withers, C.W.J. 2004. Thomas Pennant. Oxford Dictionary of National Biography. Oxford University Press. Oxford.