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ADOPTION OF NEW STANDARDIZED PELAGIC STATE BOUNDARIES FOR GEORGIA

Georgia Ornithological Society Checklist and Records Committee

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The history of trying to assign offshore waters to a specific state off the Southeastern U.S. coast is fairly long and twisted, but the Georgia Ornithological Society's Checklist and Records Committee (GCRC) has finally settled on a new convention to determine these boundaries for pelagic bird sightings. This new convention for Georgia is called "Closest Point of Land" (CPOL), and is now in use by almost all state Bird Record Committees in the U.S., as well as those in Canadian provinces and countries worldwide, because it is impartial and the most fair to all.

The reason that pelagic boundaries are often contentious among birders is clear: the birders in almost all geographic areas want to have more pelagic waters in which to find more birds. So in many places for the last 100 years or so one state has used whatever convention gave it more water, while the neighboring state used whichever convention gave *it* more water. This has sometimes led to the impossible and clearly unsatisfactory situation of the same record being claimed by more than one state; it was clear that some unified convention had to be adopted that would settle all these boundaries in the fairest and most equitable way possible.

First, we provide a brief history of Georgia ornithologists' efforts to determine the boundaries between Georgia and South Carolina to the north and Florida to the south, particularly the former. Most of the early publications about Georgia birdlife, including the first annotated checklist of Georgia birds (ACOGB; Greene et al. 1945), did not even address the question. The first big state books for Georgia (*Georgia Birds*, by Burleigh in 1958) and South Carolina (*South Carolina Bird Life*, by Sprunt and Chamberlain in 1949) do

not mention the boundaries either. *The Birdlife of the Savannah River Delta* by Tomkins (1958) mentions it only dismissively, on page 7 of the introduction:

"Political and biological boundaries are seldom the same. What is biologically true of the South Carolina side of the river, may be considered equally true of the Georgia side, so no distinction has been made. Where a species or subspecies has been authenticated as occurring in either state, that species or subspecies has been treated in the body of this work if occurring in the Delta, thus avoiding some rather senseless discussion."

This is a pretty good point for pelagic birds too, since they also orient to physiography and not political boundaries. Nonetheless, it is important that ornithologists have a set of recognized and accepted standards that govern assignment of reports to geographic areas for record-keeping purposes.

The 1960 and 1969 pocket checklists sponsored by GOS do not mention any boundaries either, and neither does the 1977 ACOGB (Denton et al.). By the mid-1980s birding trips off Georgia's coast were becoming more commonplace, so the 1986 ACOGB (Haney et al.) finally addressed the issue, on page i of the introduction:

> "The adjacent offshore area is that region within the 100 statute mile limit (160 kilometers) as defined by all states, due east of the Georgia coastline (North 30 degrees 42' to 32 degrees 02' latitude). Because of the configuration of the coast, some of this region is greater than 100 statute miles from any point in Georgia. Several states and the American Birding Association (ABA) have extended the offshore limit to 200 miles (the United States Exclusive Economic Zone [EEZ])."

The 1977 and 1986 ACOGBs are also the first references to the ABA as a national birding or ornithological arbiter. Additionally, the most current version of the ACOGB (Beaton et al. 2003) again uses the "due east" convention as stipulated in the 1986 version; however, in this edition the authors used the 200 mile limit. As a final testament to the thorniness of these Southeast state border distinctions, the 2 most thorough recent treatments of the avifauna of

Georgia's neighboring states -- *Status and Distribution of South Carolina Birds* (Post and Gauthreaux 1989; see also its McNair and Post 1993 supplement), and *The Birdlife of Florida* (Stevenson and Anderson 1994) – are also mute on the subject.

During the search for a way to determine these boundaries that would settle this issue once and for all, the GCRC (J Flynn) researched official state boundaries. This is what Georgia's state charter says about the border with South Carolina, as of 2012 (Official Code of Georgia, Annotated [OCGA] Title 50, Chapter 2, Article 1):

> "From the easternmost end of Oyster Bed Island at Navigational Buoy R "24"; E along the mean low water line of *Oyster Bed Island to the point at which the mean low water line* of Oyster Bed Island intersects the Oyster Bed Island Training Wall; then along the southern edge of that wall until reaching the Jones Island Range line; then SE along the Jones Island Range line until reaching the northern boundary of the main navigational channel; then SE along the northern boundary of the main navigational channel to Navigational Buoy R "6," via Jones Island Range and Bloody Point Range; and finally proceeding E in a straight line forming the seaward lateral boundary line to the seaward limit of Georgia, said boundary line bearing approximately 104 degrees from magnetic north, the bearing of said line being more particularly described as being at right angles to the baseline from the southernmost point of Hilton Head Island and the northernmost point of Tybee Island, drawn by the Baseline Committee in 1970."

The GCRC charted this line on NOAA Nautical Chart 11512 Edition 62 (www.charts.noaa.gov) using the 2010 declination of 6°45', and the resultant line gives an eastward bearing of 97°15' to use as the boundary line. Of course this line will shift continuously due to the naturally occurring shift in magnetic declination. Another problem with this potential solution is that this charted line is different from both the standard Georgia/South Carolina coastal border latitude line and the eastward line depicted in references such as DeLorme (2010; a popular reference used by birders). This was clearly not going to be the answer.

The OCGA also defines Georgia's pelagic boundary with Florida in Title 50, Chapter 2, Article 5. Basically this line runs along the middle of the St. Marys River navigational channel to the point of intersection with a hypothetical line connecting the seawardmost points of the jetties protecting the channel; then along that line to a control point of 30°42'45.6"N, 81°24'15.9"W; then due east to the seaward limit of Georgia; with a provision for the boundary to be extended on the same true 90° bearing so far as a need for further delimitation may arise. At least this one uses true bearing! Note that this is a different latitude than the previously cited 30°42'0.00"N.

The GCRC then examined more detailed legal maritime sources, which initially seemed just as confusing. First of all, distance from shore matters. Very simply, states control their offshore waters only out to 3 nautical miles from shore, and all waters further out come under federal jurisdiction. The inshore state boundary between Georgia and South Carolina was only finally settled by the U.S. Supreme Court in 1990, and even though it is not completely pertinent to this pelagic discussion, the details of this decision are available at:

http://www.law.cornell.edu/supremecourt/text/497/376

The outer limit of the state-controlled waters is called the "Lateral Seaward Boundary," and the Supreme Court decision cited above described an exact boundary out to the 3-mile limit. It references the Equidistant Principle (see below), but in this specific case sets a line which is a compromise between the equidistant line and the inland boundary. In layman's terms, the U.S. government uses a principle called "The Principle of Equidistance" to determine offshore state boundaries, which equates to "CPOL." According to the Territorial Sea Convention (http://untreaty.un.org/ilc/texts/instruments/english/conventions/8_1_1958_territorial_sea.pdf),

published in 1958, equidistance is defined for maritime law as "the line every point of which is equidistant from the nearest points of the baselines from which the breadth of the territorial sea of each of the 2 States is measured." (Note: In this case "State" means country, but it is the same principle, and "baseline" can be used to mean coastline.) Incidentally, this principle applies only to offshore waters, as all inland lake and river state boundaries are established by inter-state treaties.

In maritime law, most judges apparently start with the Principle of Equidistance to settle disputes due to its simplicity and mathematical unambiguity, but many courts also use another legal precept called the "Principle of Equity" to adjudicate disputes where 2 adjacent areas are not similar in shape or orientation (e.g., The roughly north-south orientation of the coastline below the Georgia/South Carolina border as compared to the more northeasterly/ easterly orientation of the coast north of that border). This means that discretion is sometimes used if the application of equidistance yields an obviously skewed result. The equity principle first appeared in U.S. maritime law in 1945, and has been used by the U.S. government in more recent disputes with Canada over delineating the Gulf of Maine. For those with a further interest in this subject, see a legal analysis by Dundua (2007) at:

> http://www.un.org/depts/los/nippon/unnff_programme_ home/fellows pages/fellows papers/dundua 0607 georgia

As the GCRC was analyzing CPOL and the other options, it became obvious that despite legal wrangling over high principles like equidistance and equity, CPOL was the convention to use in Georgia (see Fig. 1) for several reasons. This is the convention used by the U.S. Government to settle border questions between states beyond the lateral seaward boundary for important issues like resource extraction. The main bird record-keeping organization in the U.S., the ABA, also uses CPOL to settle state boundary questions, and eBird, the primary method of electronic bird record documentation in the U.S. today, also uses CPOL through Google Maps. Almost all state and provincial checklist committees in North America use CPOL to determine otherwise contentious boundaries, as do checklist committees in most other countries.



Figure 1. The new pelagic borders for Georgia in CPOL format. This map can be accessed online by going to NOAA's Multipurpose Marine Cadastre site: http://csc.noaa.gov/mmcviewer/. Note that Adobe Flash Player is required to view it. To see the CPOL boundaries on the map, toggle down the menu on the left for "Jurisdictions and Boundaries" and check the box for "Federal OCS Administrative Boundaries."

While birders in states with concave shorelines like Georgia's would probably like more equity and less equidistance, CPOL and the ABA's adoption of it for all states is here to stay. Since states with a concave coastline do not fare as well under this convention as some of the previous methods used (e.g., the lines drawn due east from Georgia's coast), a few have resisted adopting this convention. However, it is clear that this is the only consistent way to settle these borders for bird record-keeping purposes. The same CPOL rules also can be used to create county borders for those who wish to keep lists of birds in coastal counties. As Figure 1 indicates, not all Georgia coastal counties have offshore waters due to the shape of the coastline. To see a map depicting CPOL borders for Georgia counties that do have offshore waters, go to:

http://tinyurl.com/GA-pelagic-counties

In addition to the map references provided herein, the GCRC (J McNeal) has created a set of coordinates that define Georgia's offshore waters (Table 1).

The pelagic boundaries described in this article are clearly the most reasonable way to delineate state boundaries for the purposes of assigning bird records. Therefore it only makes sense to evaluate all previous Georgia pelagic records for which the exact position is known and assign them to the correct state, even if that state is no longer Georgia. It should be noted here that for the purposes of listing birds, which is where the contention often arises, what any birder does with their own list is their business. However, if you are submitting lists to the ABA, or to the GCRC for addition to the official bird records of Georgia, then CPOL is henceforth the defining convention for state boundary determination in waters outside the lateral seaward boundary. The GCRC realizes that this will unfortunately require re-evaluating many older personal records, as well as official state records, but this is the most consistent and objective way to assign these pelagic records. A list of species removed from the state list as a result of the implementation of the CPOL convention will be published, when available, in The Oriole and on the GOS website, as well as in the next edition of the ACOGB. It is hoped that a now smaller area of water assigned to Georgia will not prevent birders from continuing to make as many pelagic birding trips off Georgia's coast as possible, so that we may learn more about the many fascinating pelagic species that can be found in the offshore waters of the Southeast U.S.

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North Border		South Border	
Latitude ¹	Longitude ²	Latitude	Latitude
32.02	80.7 (Chatham) ³	30.60	79.0 (Glynn) ³
31.97	80.6	30.60	79.1
31.92	80.5	30.62	79.2
31.87	80.4	30.63	79.3
31.81	80.3	30.65	79.4
31.76	80.2	30.66	79.5
31.67	80.1	30.67	79.6
31.58	80.0	30.69	79.7
31.49	79.9	30.71	79.8
31.41	79.8	30.73	79.9
31.32	79.7	30.75	80.0
31.23	79.6	30.76	80.1
31.14	79.5	30.78	80.2
31.05	79.4	30.80	80.3
30.97	79.3	30.81	80.4
30.88	79.2	30.82	80.5 (Camden) ³
30.79	79.1	30.82	80.6
30.72	79.0 (Glynn) ³	30.82	80.7
30.66	78.9	30.82	80.6
30.59	78.8	30.82	80.7
		30.82	80.8
		30.82	80.9
		30.82	81.0
		30.81	81.1
		30.78	81.2
		30.75	81.3
		30.72	81.4

Table 1. The northern and southern pelagic boundaries for Georgia that can be used to either map bird sighting records or to determine which state you are in while offshore.

¹Degrees north.

²Degrees west.

³County.