

## *Ophiogomphus incurvatus* Appalachian Snaketail

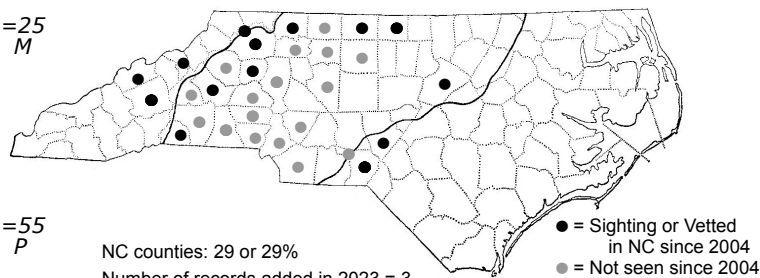
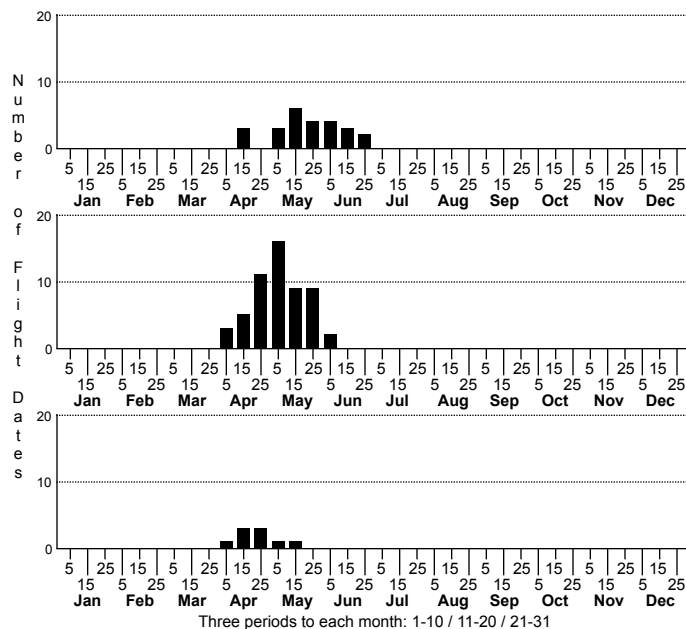


Photo (vetted) in 2024: Madison

Incomplete date not graphed:  
M=n+1

High counts of:  
12 - Richmond; C - 2019-04-15  
8 - Wake - 2022-04-10  
7 - Alexander - 2023-09-12

Earliest date: Polk; P 2020-04-04  
Latest date: Buncombe 2013-06-30

| Status |    | Rank |        |
|--------|----|------|--------|
| NC     | US | NC   | Global |
| W      | -  | S3   | G3     |

**DISTRIBUTION:** Throughout the western and central Piedmont; and sparingly in the lower elevations of the mountains, though so far known only from Buncombe and Mitchell counties in that province. Apparently absent from the northeastern Piedmont, other than a surprising record in 2022 for Wake County. Recorded east to Caswell, Wake, Moore, and Richmond counties; in the latter two counties, the records have come from the Sandhills region within the Coastal Plain. For some odd reason, the species has a rather limited range from MD to AL, and even though the common name is "Appalachian", and the general range is the southern Appalachians and Piedmont, for some interesting reason (elevation?) there are few "true" mountain records for NC.

**ABUNDANCE:** Uncommon (to very locally fairly common). It is quite widespread for a clubtail in the state, as there are records for most counties in the western 2/3rds of the NC Piedmont (though most are pre-2000). However, this is globally a scarce species, as NatureServe has a G3 (rare) global rank. Thus, NC might have the highest density of the species.

**FLIGHT:** Early or mid-April to late June, both in the mountains/foothills and in the remainder of the Piedmont and western Sandhills. The records for Richmond County are from early April to mid-May, and thus in the southern Piedmont and Sandhills counties, the flight may start about 7-10 days earlier than in the northern Piedmont/foothills.

**HABITAT:** Small to medium streams, often in the open, for breeding; usually the streams are clear with some riffles and some gravel.

**BEHAVIOR:** Males typically perch on twigs or low vegetation near a creek; they make short patrols over the water.

**COMMENTS:** Though this is a globally scarce species, with Paulson (2011) calling it "rare" and Dunkle (2000) calling it "uncommon", it apparently is most numerous in its range in the western and central NC Piedmont. Snaketails (clubtails in the genus *Ophiogomphus*) are typically a bit more colorful than clubtails in other genera, especially with the bright lime-green or grass-green sides of the thorax. Because of its G3 global rank, though it is not a rare species in NC, the N.C. Natural Heritage Program has added the species to its Watch List in 2012. There have been quite a few recent records, and most significant are the handful from small Sandhills streams in the far western Coastal Plain (Moore and Richmond counties). In fact, this is our only snaketail (*Ophiogomphus*) that occurs in the Coastal Plain, even if just at the western edge. However, despite these recent records from the western Sandhills, there has been nary a single recent record for the large region from Richmond and Moore counties to the Piedmont foothills. Has the species clearly declined across most of the Piedmont, or is there simply not enough field work in the southern Piedmont?