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Palmetto



The panhandle lily
(*Lilium iridollae* M.G. Henry)
of northwest Florida

“Here’s
looking at
you, kid”*



By Ann F. Johnson No question about it, the panhandle lily is a looker. As rare as it is beautiful, it was first described by Mary Gibson Henry in 1946 from a specimen collected on August 1, 1946 near the Gulf coast in Baldwin County, Alabama (Henry 1946). She described its habitat as “sphagnum over black muck along a wooded creek”. Henry subsequently found 20 populations east of the original one, in Escambia, Santa Rosa, Okaloosa, and Walton counties, Florida. Sixty years and at least seven surveys later, its known range in Florida remains the same, while its Alabama range has been extended slightly to include Covington and Escambia Counties, just north of the Florida border, and the number of known sites has grown from 20 to 80 (Judd 1980, FNAI 1992, Chafin and Schotz 1995, Johnson and Printiss 1999, Schotz 2004, Anglin et al. 2005, Johnson et al. 2006). [Fig. 1]

Lilium iridollae is 4 to 6 feet tall and usually bears a single flower nodding at the tip of a naked stem. The stem has 2 or 3 whorls of leaves at midstem and is bare (or has only small scale-like leaves) toward the flowering tip. Though usually having only one flower, some stems have 2 or 3 and up to 8 have been counted on an exceptionally vigorous specimen. The flowers have a yellow to light orange hue, in contrast to the orange to reddish hue of the flowers of two similar “tiger” lilies that also grow in panhandle Florida, *L. superbum*, the Turk’s cap lily, and

L. michauxii, the Carolina lily (Chafin 2000). Of these, *L. superbum*, a northerner ranging up to New Hampshire, favors the same wet mucky sites as *L. iridollae* and is found east and north of the panhandle lily’s range, in Jackson, Leon and Jefferson counties, Florida and in southern Alabama. In addition to its redder flowers, the Turk’s cap lily differs from the panhandle lily in being taller, leafier, and generally bearing more flowers per stem than its southern cousin. *L. michauxii*, in contrast, is shorter (2-3 ft) and occupies drier habitats (slope forests) than *L. iridollae*. The Carolina lily’s range overlaps that of the panhandle lily in Walton County and continues east to Liberty, Jackson and Gadsden counties in Florida, as well as north to the southern Appalachians. Mary Henry chose an unusual Latin name for her discovery to accentuate its flower color difference with its two rivals: “Because of its rich yellow color one may liken its flower to a golden treasure, and because it is the ‘pot of gold’ at the foot of my rainbow, I am calling this new species ‘*Lilium iridollae*’.” (According to Mark Garland, the specific epithet is a combination of the stem of the Greek word for rainbow (“irid”) and the Latin word for pot (“olla”).

For a time in the 1990’s the range of panhandle lily came close to being stretched to cover the Sandhills region of the Carolinas and Virginia. In 2002, however, the lilies from that area were described

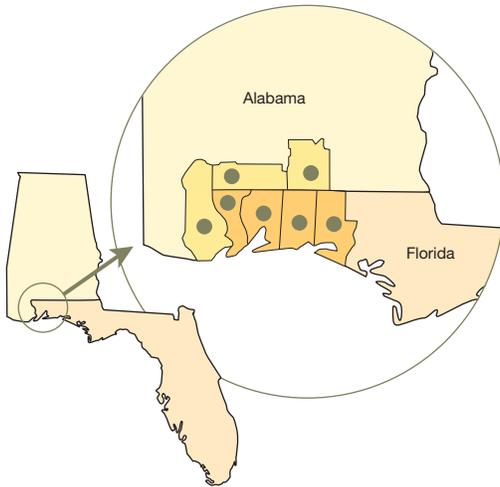


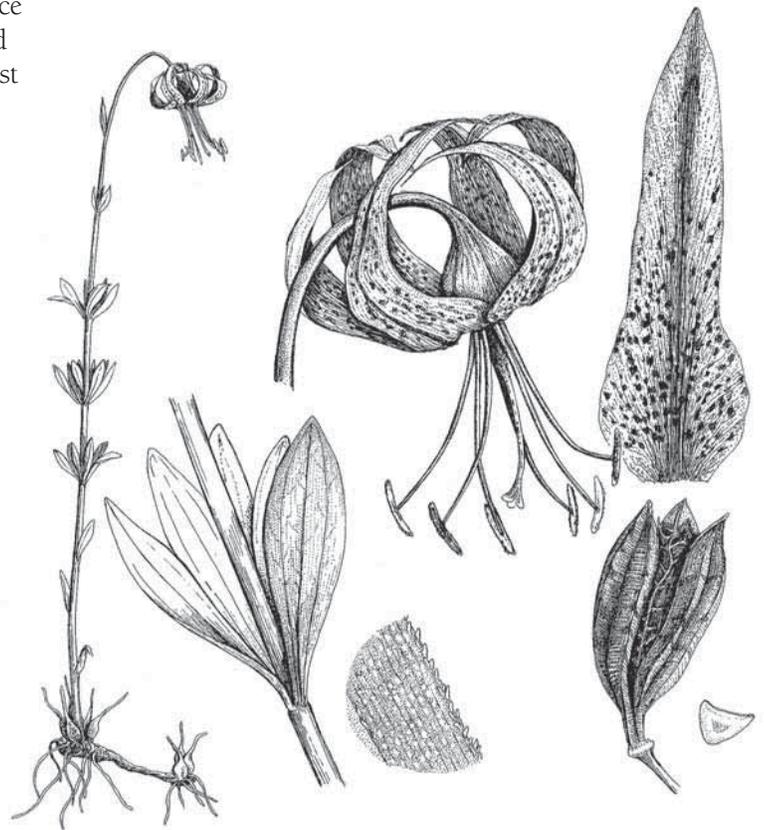
Fig. 1. Range of *Lilium iridollae* in Florida and Alabama.

as a new (fire-loving) species, *Lilium pyrophilum* M.W. Skinner and Sorrie (Skinner and Sorrie 2003). The Sandhills lily shares with the panhandle lily its wet mucky habitat and the tendency to produce secondary bulbs as offshoots from the original bulb; it differs in flower color (reddish orange), flower number (1-20 vs. 1-3 in panhandle lily) and the lack of fleshy scale leaves on its bulbs. The authors speculate that *L. iridollae* and *L. pyrophilum* may have shared a common ancestor, since eleven other species that grow in the same stream head habitat also have disjunct ranges between the Gulf coast and the Carolina Sandhills. Panhandle lilies with a reddish-orange tinge are occasionally seen and may be throwbacks to this putative progenitor.

The habitat of panhandle lily is largely the upper drainages of small wooded streams in steep terrain. The canopy of these streams is open and mostly deciduous, consisting of black gum (*Nyssa sylvatica* var. *biflora*), red maple (*Acer rubrum*) and tuliptree (*Liriodendron tulipifera*). Panhandle lily is found either in light shade under the streamside forest canopy or poking its heads above the evergreen shrubs (*Ilex coriacea*, *Cyrilla racemiflora*) on the forest edge. Its populations are concentrated along the upper reaches of tributaries to the Escambia, Shoal, East Bay, and Blackwater Rivers. They are also found in larger, lightly canopied deciduous swamps near the mouths of the Yellow and Blackwater Rivers. One common denominator of these sites is permanently saturated soil with some clay content. Panhandle lily has not been found along tributaries of streams within its range draining coarse sandy soil, i.e., Sweetwater Creek and the west fork of Big Coldwater Creek (Schmidt, 1978).

From the time of its discovery the panhandle lily has been considered rare and getting rarer. Mary Henry recounts how she found only a dozen lilies at the type locality where a few years previously the local residents described the same meadow as yellow with lilies. This decline Henry blamed on heavy cattle grazing then occurring in the meadow (as well as hog rooting) and called for an end to open range in Florida. Open range ended, the cows departed and with them went the yearly burning practiced by their owners to keep the grass fresh and green. Recent surveys (Florida Natural Areas Inventory 1992) now call for increased fire to keep streamside shrubs from shading out the lily. A 1999 re-survey of known sites for the lily by Johnson and Printiss found fish ponds, clearing, and bridge construction had eliminated 5 previously reported populations. Fish ponds were also noted by Skinner and Sorrie (2002) as a threat to its Sandhills cousin. Apparently these lilies tend to favor precisely those upper stream head stretches where construction of fish ponds escapes regulatory notice. On private lands the panhandle lily's outlook appears bleak, but luckily most its range is on two publicly managed areas, Blackwater River State Forest and Eglin Air Force Base. The managers of both these areas are aware of their lily populations and practice regular burning (and have no plans for fish ponds).

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“Here’s looking at you, kid”

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The panhandle lily has been listed as endangered by the State of Florida since 1992. Although under consideration since 1975, it is not currently listed by the Federal government.

Still, it’s comforting to think the panhandle lily will continue to nod its gorgeous heads beside panhandle streams in the depths of August through many a natural (and political) storm to come, so future generations can raise a glass and say, “Here’s looking at you, kid.” ☀

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ABOUT THE AUTHOR – **Ann Johnson, Ph.D.** has been a community ecologist with the Florida Natural Areas Inventory since 1998. Ann has a Ph.D. in Ecology from the University of California at Davis and has done post-doctoral studies on scrub species at Archbold Biological Station in Florida.

