

Prepared in cooperation with Volusia County

Volusia Blue Spring

—A Hydrological Treasure

Springs are natural openings in the ground through which water beneath the surface discharges into hydrologic features such as lakes, rivers, or the ocean. The beautiful springs and spring rivers are among Florida's most valued natural resources; their gemlike refreshing waters have been a focal point of life from prehistoric times to the present (2008). The steady flow of freshwater at a nearly constant water temperature attracted animals now long absent from Florida's landscape (Scott and others, 2004). Fossil remains and human artifacts, discovered by divers from many spring runs, attest to the importance of springs to the State's earliest inhabitants. Explorers of Florida, from Ponce de Leon to John and William Bartram and others, often mentioned the springs that were scattered across central and northern Florida. As colonists and settlers began to inhabit Florida, springs continued to be the focus of human activity, becoming sites of missions, towns, and steamboat landings.

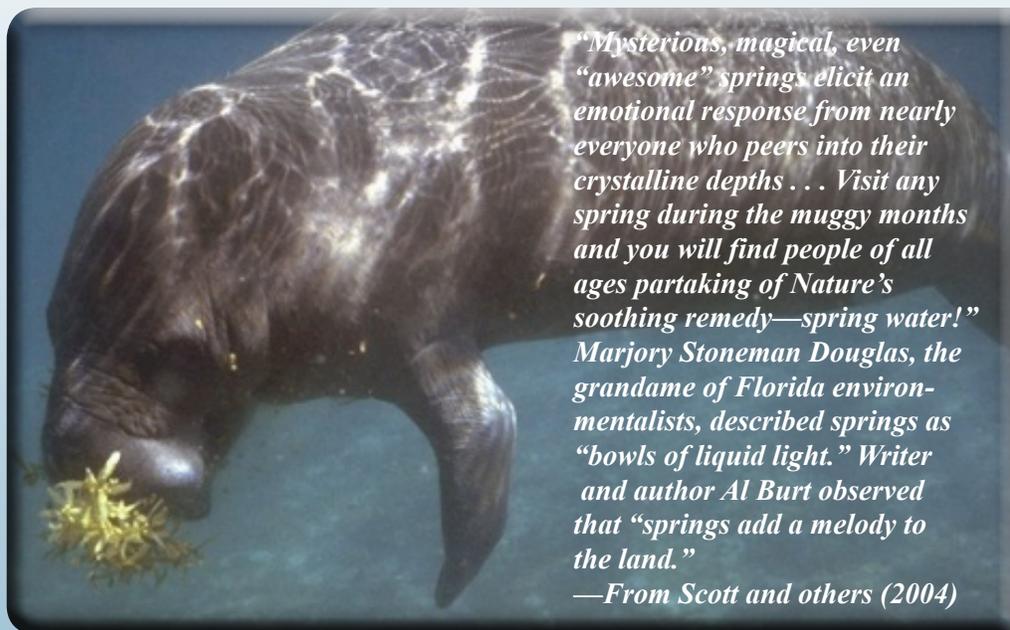
Recreational opportunities provided by the springs are numerous, and many springs have been preserved as parks. Swimming, snorkeling, diving, and canoeing are among the most common activities.

Because "Blue Spring" is a common name belonging to several

springs in Florida, the Florida Department of Environmental Protection adopted the convention of referring to these springs with the county name placed before the name "Blue Spring." In this fact sheet, Blue Spring refers to Volusia Blue Spring (fig. 1).

Blue Spring, one of more than 300 springs in Florida, has been open to the public as a State park since 1972. It is the largest spring on the St. Johns River and is a designated manatee refuge. With an average discharge (or rate of water outflow) of about 158 ft³/s (cubic feet per second), or

102 million gallons per day, Blue Spring is 1 of 27 springs in Florida classified as a first-magnitude spring, out of a possible 8 levels of magnitude (Spechler and Schiffer, 1995). First-magnitude springs are the largest springs and are defined as those that discharge at least 100 ft³/s. Blue Spring ranks 17th in rate of discharge compared with the other Florida springs. The average discharge for an entire day (24 hours) is equivalent to a pool of water the size of a football field (360 x 160 feet) and about 240 feet deep.



"Mysterious, magical, even 'awesome' springs elicit an emotional response from nearly everyone who peers into their crystalline depths . . . Visit any spring during the muggy months and you will find people of all ages partaking of Nature's soothing remedy—spring water!"
Marjory Stoneman Douglas, the grandame of Florida environmentalists, described springs as "bowls of liquid light." Writer and author Al Burt observed that "springs add a melody to the land."

—From Scott and others (2004)

A West Indian manatee, commonly known as a sea cow, feeding.
(Photograph courtesy of the USGS Sirenia Project.)