

OF

REGION ONE  
Richmond 20, Virginia

L58

OCT 12 1961

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Memorandum

To: The Director

From: Regional Director, Region One

Subject: Reconnaissance Report on Chassahowitzka Springs and River,  
Citrus County, Florida

Attached is a memorandum report on the Chassahowitzka Springs area, Florida, prepared by Park Planner Vinten following his investigation there on August 22, 1961. His study was made as a result of Ben Thompson's memorandum of July 14, 1961, suggesting that we consider this area in our National Recreation Plan studies and possibly in our considerations for the National Park System.

This report points out that of the few remaining large springs in Florida which have not been developed by commercial interests, Chassahowitzka appears to be the most significant. When consideration is enlarged to include 2½ miles of the Chassahowitzka River and 2,400 acres of the surrounding land and fresh and salt water biological community, it at once becomes evident that consideration for preservation in some form of public ownership should be given. The fact that such a spring is not now a major feature in an area of the National Park System suggests that here may be an opportunity to fill that particular gap.

On the basis of Mr. Vinten's report we believe that the Chassahowitzka Springs area warrants a full scale study to more fully determine its suitability and feasibility as a possible unit of the National Park System.

We shall plan to conduct a detailed study in the area, probably early next year.

Regional Director

In Triplicate

Color Scans

1/3/2003

ON MICROFILM

Attachments (3)

PLEASE RETURN TO:

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NATIONAL PARK SERVICE

REGION ONE  
Richmond 20, Virginia

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OCT 12 1961

Memorandum

To: Regional Director, Region One  
From: C. R. Vinten, Park Planner  
Subject: Reconnaissance Report on Chassahowitzka Springs and River,  
Citrus County, Florida

INTRODUCTION

Interest which has long been dormant in Chassahowitzka Springs and River was revived in late June during the conference between Dr. John Henry Davis, Jr., Professor of Botany at the University of Florida, and Chief of the Division of Interpretation, Dan Beard. The purpose of the investigation was to determine the recreational significance of the springs and river.

We contacted Dr. Davis at the University of Florida and set the date of August 22 for a trip to Chassahowitzka. Two graduate students, Mr. Al Hill and Mr. Bob Smith, students in botany, were assigned to us for the day. They were well acquainted with the springs and the river from previous collecting expeditions.

In order to make a comparison of values, we made a routine visit to both Ichatucknee Springs and Blue Springs on August 28, en route to Tallahassee. Comments on these two areas are included in the supplement of this report.

#### SUMMARY OF RECOMMENDATIONS

- I. Chassahowitzka Springs was considered of superior value, not from the standpoint of the volume of water produced alone, or its use as a swimming hole or tourist attraction, but it was judged by the more substantial values of scientific importance in a unique field of botanical interest. It was judged from its aquatic and marine flora and fauna, its scenic beauty, its unspoiled lands and waters, and the ease of preservation of the shores and back country.
- II. An area of about 2,400 acres is shown on the attached map of Citrus County in red ink which encompasses a subtropical region having a range of ecological variation from fresh water to salt water.
- III. The length of river within two and one-half miles of the spring represents a botanical spread from the low forms of algae and aquatic slimes, to aerial and terrestrial orchids, three native palms and lowland hardwood forests.
- IV. These values are not known to exist in any other undeveloped springs and rivers, and it is our recommendation that serious consideration be given to the acquisition and establishment of about a 2,400-acre area, as shown on the map, as a national monument for its scientific and public interest.

V. The western end of this area would join the Chassahowitzka National Wildlife Refuge which places under protection about 30,000 acres of tidal marsh and swamp lands, assuring the addition of this substantial acreage to the field of conservation.

VI. The combined natural values here are greater than those at Ichatucknee and Blue Springs, and National Monument status can be awarded to the Chassahowitzka area without fear of errors in selection. These three springs are considered the best from all standpoints of Florida's remaining undeveloped springs and rivers.

#### DESCRIPTION OF THE AREA

This region is an excellent example of the hardwood and palm, low-hamock, wet jungle which prevails over a broad area of this section of the state. Chassahowitzka Spring and River are located within a heavy framework of jungle forests which is almost impenetrable. The prevailing species are cedar, magnolia virginiana, laurel and water oaks, wax myrtle, maples, ash, hickory and other wet-growing hardwood trees, three types of palms, the Sabal palmetto, the Sabal minor, and the needle palm, (Rhapidophyllum Hystrix). In the trees along the shore were seen many orchids and air plants, and occasionally along the banks were patches of water hyacinth or narrow edgings of saw grass, wild rice, cattails, etc.

The waters of the river were three to six feet deep and covered with a fairly lush growth of eel grass and aquatic plants, and the water



was so perfectly clear one could see large and small fish and many blue crabs moving about at a distance.

Birds were not too frequent, for in August the heavy concentrations of water birds have moved northward. However, we did see American and snowy egrets, Louisiana herons, one osprey or fishhawk, and a few kingfishers.

The accompanying photographs show the scenes along the river shores in detail, but from a boat in the river, the feeling was of a journey through a sub-tropical wilderness, the solitude, the big thick palm borders of the hardwood forests, the air plants and orchids in the trees, and the lazy clear flow of the broad river, offered a type of recreation which is becoming all too scarce these days.

Not only was there a simple enjoyment available from making the trip up and down the river, but the knowledge gained from being in the company with two graduate students in botany gave a degree of understanding which intensified this enjoyment considerably.

#### A NEW EDUCATIONAL CONCEPT

The operation of this spring and river as a national monument, could be in contrast to the development of other famous springs in Florida which feature tourists trips in glass-bottom boats, underwater mermaid ballets, artificial waterfalls and imitation water wheels and grist mills. This area could become a great botanical laboratory for the

scientist, a botanical classroom for the student, and an enjoyable introduction to botany in the hands of a skilled and trained interpreter. The small residential and commercial structures which are concentrated in limited numbers at the upper and lower ends of this two and one-half mile stretch could be acquired and these areas converted into visitor centers for indoctrination and the starting of a casual and relaxing trip by water into a land of strange associations. Here we find that both terrestrial and aquatic plants move from fresh water to salt water and from salt water to fresh water with only a slight change in their structure. When fresh water plants move into the brackish waters they develop thicker leaves and become more succulent. However, this movement does not apply to fish and crabs which move quite freely from salt water to fresh water, but any movement of fresh water species into salt water is bound to be disastrous.

Where visitors now flock to commercial springs, where unique forest has been replaced by tourist-trap types of buildings and attractions, here is an opportunity for the acquisition of the few small shacks, which shelter fish houses and little sandwich shops, so as to permit the small disturbed area to go back to nature. At a safe distance from the springs, visitor facilities could be provided to serve the public who would come there for a substantial experience in which they would learn something of nature through the versatile and painless methods perfected by the National Park Service. Public enjoyment

here need not be limited to the educational values of the spring and river, because we observed returning sports fishermen who had made the short run down to the waters of the National Wildlife Refuge on trout fishing expeditions. They were returning in a very happy frame of mind with a goodly supply of trout which would weigh three or four pounds apiece. Such an activity in these surroundings need not be prohibited, as those who fish in the out-of-doors are often the ones who respond readily to an educational experience in the natural sciences.

The geological story can also be told in such a visitor center, explaining the processes of nature which produced the scenery and the underlying structures which are responsible for these great springs which produce millions of gallons of water each day. Here, at the Chassahowitzka Springs area, are several springs within a radius of about a hundred yards, one group with three or four outlets just a few hundred feet northeast of the main pool, and a second group at the head of Crab Creek a few hundred feet northwest of the main pool. The average flow from this group of springs over the years has been about 53 million gallons per day. The water is so clear that the entire phenomenon can be observed through a glass-bottom skiff or glass-bottom bucket to the depth of thirty or forty feet.

The scientific values represented here are easily available, on one day trips, to both the large state institutions which number their

students at over 10,000 in each university. The area is also available to the numerous colleges in southern Florida and in the southeast, on trips which could average two and in some cases three days in length.

Potential public use can be estimated from population statistics. Within a fifty-mile radius of the spring, population in 1950 was 97,000, and in 1960 had increased to 142,000. Within a hundred-mile radius of the spring, the population in 1950 was 670,000, and in 1960 was over 1,115,000. The region here is growing and the public need for unspoiled areas of this kind is increasing in direct proportion to this population growth. By the same token the few unspoiled and undeveloped springs remaining cannot be expected to survive more than a few short years because this same population growth increases the pressure of commercialism into any remote area which can furnish an excuse for a successful type of tourist attraction. The springs of Florida have proven to be one of these attractions.

#### PROBLEMS OF PROCEDURE

On the basis of this initial and preliminary study, without the benefit of investigation of land values or property rights held by present owners, there appears to be no major obstacle toward the acquisition of land. Land values near the head of the spring may be fairly high, but most of the region is of little value agriculturally or from the standpoint of forestry, farming or grazing. At Ichatucknee and Blue Springs the lands are high and rolling woodland, suitable for farming, forestry and grazing.



However, the almost submerged low hammock lands are suited only to limited recreational use, and hydraulic fills would make them usable only at the expense of killing the low hardwood and palm hammocks. Several new homes have appeared east of the main pool of the spring where some limited canals have been dug to provide fills for a canal-type subdivision. In other places especially along the river shore small shacks have been built in places where land ownership would be quite doubtful. On the shore of the spring at the head of Crab Creek, there is a new small residence which apparently has been built more as a fishing lodge than as a permanent residence.

There may be problems of navigational rights on the waters of the river and spring, but any navigation of a commercial nature would tie in with commercial operations in connection with fishing and crab-trapping. If a base of these operations were purchased the use of the streams for commercial navigation of small outboard type boats would no longer have any justification. Problems such as these may be given further study and analysis and solutions may be simplified when boundaries are designated, or when funds are available for acquisition.

#### CONCLUSION

The conclusion reached from this study is that Chassahowitzka Springs and River is definitely recommended for National Monument status. We

find it far superior in many ways to Ichatucknee and Blue Springs, the other two remaining undeveloped and unspoiled springs which are known to remain. The Chassahowitzka area is of considerable scientific value because of its interrelation between fresh water and salt water conditions and because of its association with the National Wildlife Refuge to the west. It possesses considerable scenic merit, coupled with the charm of a wilderness river flanked by subtropical hardwood and palm low-hammock lands. This wet jungle character can assure preservation of natural values and will provide its own barrier against commercial exploitation and development. Its proximity to United States Highways No. 19, 41, 98 and 301 put it within reach of some of the heaviest traveled north and south roads in the southeast. The substantial scientific values here can become broad educational values when the excellent techniques of interpretation perfected by the National Park Service are applied to the public service which this area can render.



C. R. Vinton  
Park Planner



CHASSAHOWITZKA SPRING  
"The Main Pool"



Small houseboat on left - Diving platform on right used by local people. "Boil" of spring is at right of diving platform. Picture taken from boat landing at Fish House, August 22, 1961.

CHASSAHOWITZKA RIVER

PICTURE MISSING

The Chassahowitzka River winds between jungle walls for about two miles - in total solitude except for about 15 river-edge cabins at scattered locations. An elderly couple, the only other intrusion here, adds a very appropriate contrast to the scene, as they fish near the dense shore.



#### CHASSAHOWITZKA SPRING



About halfway between the spring and the marshes the forest wall is edged by a dense stand of cabbage palms. Water here is very clear and shallow, a few feet deep, and covered with a variety of aquatic plants. The current is moderate, and water hyacinths do not become a hazard.

#### CHASSAHOWITZKA RIVER



The winding river is alternately narrow and broad, but only navigable for small outboard type boats. It is used throughout by both commercial and sports fishermen whose catches come from salt water, further downstream.



## CHASSAHOWITZKA SPRING AND RIVER



The short transition here from fresh, to brackish, to salt water ecology gives the spring and river its highest significance as a scientific laboratory. Here we are 70 miles from the University of Florida and 180 miles from Florida State University. The botanical spread covers the range from the algae and aquatic slimes to terrestrial and aerial orchids.

## CHASSAHOWITZKA RIVER



The lower river widens, and here saw grass and cattails of the brackish margins develop thicker leaves and a heavier appearance. From here to the marshes, about 1/4 mile to the west, about a dozen small piers represent that many small vacation homes.



CHASSAHOWITZKA RIVER



Here, the end of the hardwoods and palms gives way to a maze of salt marsh islands, which form the beginning of the U. S. Wildlife Refuge beyond. The water here has a slightly salty taste, but plant associations seem to cling to the ecological patterns of fresh water.

CHASSAHOWITZKA RIVER



At the eastern boundary of the Federal wildlife refuge, the view to the west is across flat marshes of both fresh and salt water grasses. The horizon is also flat, broken by an occasional cabbage palm "island" or a patch of exotic "Australian Pine" (left). Beyond this point one should hire a guide.



CHASSAHOWITZKA RIVER



One of the river-edge cabins which gives promise of raising questions of land title and the access rights of its builders. All of these were locked and barricaded on the date of the study.

CHASSAHOWITZKA SPRING  
"Crab Creek"



Another group of small springs is about 500 feet below the main pool where this small houseboat marks the junction with the river. The view is from the spring-pool looking down "Crab Creek". (A second group of small springs lies above the main pool a few hundred feet.)



CHASSAHOWITZKA SPRING  
"Crab Creek"



This view is in the opposite direction from the bottom picture on the preceding page. A new residence has just been completed, the only intrusion here. It can be reached by means of a narrow woods road, and also by shallow draft boat.



SUPPLEMENTARY DATA

on

ICHATUCKNEE SPRINGS - COLUMBIA COUNTY

and

BLUE SPRING - MADISON COUNTY

A study to provide comparisons to justify the significance of Chassahowitzka Springs and River; to assure the national stature of this spring and river in comparison to the others, so as to present it with some degree of perspective as a candidate for National Monument recognition.

The following two pages are designed to present these two undeveloped springs for the purpose of comparing their natural values and particularly their scientific interest and educational potential.

ICHATUCKNEE SPRINGS - COLUMBIA COUNTY  
"The Main Pool"



The main pool at - Ichatucknee Springs - Columbia County. Diving platform and a few "pole" picnic tables the only structures. Shows signs of heavy use and erosion of high banks. Otherwise wild and environs primitive, except country road near spring is now being widened. This is one of six springs producing combined flow, ranking 3rd in magnitude in Florida.

ICHATUCKNEE RIVER - AT U. S. #441



Ichatucknee River - at U. S. #441, 3 miles below the main spring at bridge on U. S. #441. Here the stream is about 50 feet wide, 10 feet or more in depth, extreme clarity of water makes it look like a wet paved road. Bottom is white sand and algae. Current is swift.



BLUE SPRING - MADISON COUNTY



Heavily used - no improvements or facilities. Note - high sand bank - completely worn. Spring "boil" is under tree in lower left corner. Withlacoochee River is about 50 yards from white spot in river (center) made by children swimming.

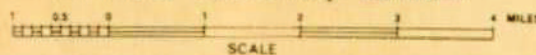
BLUE SPRING - MADISON COUNTY



View toward high worn bank in above picture. Spring "boil" is under high, dark bank in right center, above "mermaid" in lower right. Other high banks around spring are worn by heavy use and eroded by rains. Pool and stream bottoms are rough and rocky.



# VICINITY MAP CHASSAHOWITZKA SPRINGS AREA CITRUS COUNTY, FLORIDA



CHASSAHOWITZKA  
NATIONAL  
WILDLIFE REFUGE

CHASSAHOWITZKA SPRINGS

NOTE:  
STUDY AREA INCLUDES APPROX.  
2,400 ACRES NOT INCLUDING  
WILDLIFE REFUGE HOLDINGS.