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## Information Sheet on Ramsar Wetlands

1. Date this sheet was completed/updated: 17 September 2002

2. Country: Cuba

3. Name of wetland: Buenavista

4. Geographical coordinates:

22° 08' – 22° 46' North latitude  
78° 46' – 78° 53' West longitude

5. Altitude: 0–25 metres above sea level

6. Area: 313,500 hectares

7. Overview:

This wetland is located in the central region of the island of Cuba, north of the provinces of Villa Clara (municipio of Caibarién) and Sancti Spíritus (municipio of Yaguajay). Its relief is mainly flat, having been formed by abrasive plains and accumulative processes (the mangrove complex). There are long beaches with dunes and dune systems, salt flats and lagoons that communicate directly and indirectly with the sea, fields of karren, karst dolines, karst cavities and hills that form the highest elevations of relief. Most of the area, where the Caguanes and Santa María-Los Caimanes national parks are found, is protected. This wetland has important fauna and flora, landscapes, archaeological sites, speleological possibilities and cultural attractions. There are no human communities in the wetland. The basic activity is conservation. Economic activities include commercial and sport fishing, use of the forest, agriculture (basically livestock raising) and tourism.

8. Wetland type:

Marine-coastal: A, B, C, D, E, G, H, I, J and Zk

Inland: M and O

Artificial: 3, 8 and 9

9. Ramsar criteria: 1, 2 and 3

Criteria that best characterize the site: 1

10. Map of site included? Please tick yes -or- no

11. Name and address of the compiler of this form:

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12. Justification of the criteria selected under point 9, on previous page:

Criterion 1: The areas of the wetland known as the Caguanes, Guayarues, Judas and Piedra cays are characterized by outcroppings of calcareous blocks from the Miocene (Güines formation) formed from organogenic limestone with alternations of marl that form relicts, uplifted by neo-tectonic forces and located on the edge of the syncline of Buenavista Bay. These blocks have been moulded in the form of karstic domes and small hills that resemble mogotes and are the result of a complex tectonic sand structure acted on by strong marine and karstic processes. In the sea, these calcareous domes form cays that create a unique type of landscape in Cuba. The high degree of karsification has created numerous horizontal caves created by the groundwater with abundant dolines. The most important feature is the density of caves on Cayo Caguanes, whose cave system of 35 caves has more than 11 kilometres of galleries in an area of 114 hectares. This cay has one of the highest degrees of cave development in Cuba. The caves in this area are classified in a genetic subtype, the Caguanes subtype, of Cuban caves created by groundwater, and are representative of open caves formed by the water table in a hilly landscape where the development of labyrinth galleries is not controlled primarily by faults.

Criterion 2: In this area, there are reports of isolated specimens of American manatee (*Trichechus manatus*), an endangered species because of a decrease in its habitat.

Criterion 3: There are 12 plant formations (mangrove, semi-deciduous microphytic forest, semi-deciduous mesophytic forest, a rocky coast complex, xeromorphic matorral over sand, xeromorphic matorral over karst, evergreen sub-coastal microphytic forest, evergreen low sub-coastal microphytic forest, seasonally flooded evergreen microphytic forest, xeromorphic coastal matorral, sub-coastal over a karst base, sandy coastal complex and halophyte communities with patches of mangrove. More than 263 plant species have been recorded so far, in 145 genera and 64 families. About 429 species of fauna have been identified in the area, in 340 genera and 170 families. There are 267 species of invertebrates and 162 species of vertebrates. About 81 endemic species and subspecies of fauna have been recorded, of which 10 have local distribution and two have regional distribution.

13. General location: This wetland is located in the northern part of the central region of Cuba, in the municipios of Caibarién in the province of Villa Clara, Yaguajay in the province of Sancti Spíritus and Morón in the province of Ciego de Avila.

14. Physical features:

Geology and geomorphology: This wetland is formed by Quaternary sediments (Bamburanao clays over bed rock) in which calcareous blocks from the Miocene (the Güines formation) emerge. The blocks are formed from organogenic limestone with intercalations of marls, which created reliefs raised by neo-tectonic forces located on the edge of the syncline of Buenavista Bay. These blocks have been moulded into karstified domes in the form of small hills that resemble mogotes as the result of a complex tectonic structure and strong marine and karst processes. These calcareous domes form cays in the sea that create a unique type of landscape in Cuba. There is evidence of marine abrasive processes on the steep coasts in the tectonic structural cracks as well as the formation of niches and sharp coastal karrens. The high degree of karstification has created many horizontal caves formed by groundwater with abundant dolines. The degree of karstification (surface and subterranean) of these calcareous domes is very high, and the labyrinth of galleries is not controlled primarily by faults. This type of cave has a horizontal development and in many cases forms labyrinths. The sea level closely controls the water table, and the floors of the caves reflect several phases of evolution. In the final phases, the processes of dolinization are very abundant. There are sometimes water table lakes. The lagoonal-paludial and marine forms of accumulation are located to the west of the largest cays as a result of the dominant direction of the currents (occupying 80 per cent of the total area) and along the whole mainland coast. The cays are occupied by mangroves, with a high degree of hydromorphism, with moderate accumulative processes. This includes areas of river-marine plain in its lower part with partially swampy plains and flat terraces. The marine bottoms are basically mud formed by the accumulation of sediments.

Hydrology: The underground water in the wetland is fed by 100–200 millimetres of atmospheric precipitation and total precipitation in the range of 800–1400 millimetres. Several short streams that begin in the Sierra de Meneses y Cueto drain towards the area but usually disappear into the ground on the coastal plain given the existing karst. Because the hydrological network does not have the capacity to evacuate surface runoff during periods of flooding, a system of irrigation and drainage canals has been developed in order to decrease problems from flooding in the areas surrounding the wetland. As a result, most of the rivers are channelled in the mangroves where they discharge their water. The depth of water table varies between 0.2 and 12 metres during the rainy season and between 0.4 and 15 metres during the dry season. The water table is closest to the surface in the north and deepest in May and shallowest in October and November. This wetland forms part of the Jatibonico del Norte basin.

Types of soil and chemical characteristics: These soils are formed on coastal plains with flat terrain with micro topography of low rolling hills and deficient drainage. Under these soils are transported clay and limestone deposits of alluvial origin. The main process of soil formation is siltation. The following soil types exist in the area, associated with various forms of relief.

(a) Red rendzina: This appears in patches on calcareous hills together with the areas of bare karst with lapies (*diente de perro*).

(b) Dark plastic gleysols: These soils are usually shallow, limited by heavy gleyification and develop on rather low reliefs and over transported materials. External and internal drainage is deficient. There are grey and yellowish grey subtypes.

(c) Mineral solonchak soils in mangrove: These soils are linked to the coastal mangroves with a high content of organic material mixed with minerals. They are characterized by clumps of soluble salts and a high percentage of sodium, found moderately deep in flat topography.

(d) Yellowish latosols: These are yellowish red soils. In general, their depth varies from medium to deep, and their topography ranges from flat to slightly hilly. Because of this, internal and external drainage ranges from moderate to deficient. There is a typical concrescent subtype. Towards the northern part of this wetland, there is a problem of salinization, which is more accentuated towards the northeast.

Chemical properties of the first layer of soil to an average depth of 22 centimetres

<b>Coefficient and composition</b>	<b>Minimum</b>	<b>Average</b>	<b>Maximum</b>
pH	5.7	7.1	8.5
pK	4.5	6.0	8.0
Y <sub>1</sub> (molecular weight/100 g)	0.37	1.45	2.00
CO <sub>3</sub> (percent)	0.09	2.77	23.45
Ca <sup>++</sup> (molecular weight/100 g)	24.75	41.59	67.69
Mg <sup>++</sup> (molecular weight/100 g)	17.61	32.43	50.22
K <sup>+</sup> (molecular weight/100 g)	-	-	-

Climate: A tropical climate with insufficient moisture with relatively humid summers dominates the area of the flatlands and cays.

Precipitation: There are two periods: the rainy season (May–October) and the dry season (November–April). Average annual precipitation ranges between 1200 and 1400 millimetres.

Temperature: The annual average temperature ranges between 24.5° and 25.5° C with minimum in January (22.1° C) and maximum in July (28.4° C).

Wind: There is a dominance of north-westerlies that reach greatest intensity when they are associated with the activity of tropical cyclones, summer storms and cold fronts. The annual average wind velocity ranges between 8 and 10 kilometres/hour.

Humidity: Average annual humidity for the area ranges between 78 and 80 per cent.

Atmospheric pressure: The annual average atmospheric pressure ranges between 1018.0 and 1019.0 hectopascals.

15. Hydrological values:

Ground water has a mineral content of 1 to 2 grams/litre for both seasons with dominance of sodium chloride forming a strip parallel to the coastline. Underground runoff dominates, which is confirmed by the formation and origin of the cave system in the karstic massifs that form the domes of the insular group. The dominant underground water is heavy in sodium chloride with a mineral content of 1 to 2 grams/litre. Two of the cays (Aguada and Caguanes) have ground water that forms freshwater lakes in caves. There are also saltwater lakes. The ground-water systems rise and fall in accordance with the system of tides.

16. Ecological features:

This wetland is located in the phytogeographical province of central Cuba on the northern central-eastern coast (Samek, 1973). According to Del Risco and Vandama, it is in the phytogeographical province of Sagua-Palmarito del Cauto and according to De la Cruz in the zoogeographical province of central Cuba between Cayo Francés, Cayo Coco and Ondulados de Villa Clara (Nuevo Atlas Nacional). From the point of view of conservation, this wetland almost forms a single unit: the Caibarién cays to Caguanes ecoregion (Iñigues and Perera, unpublished). The biota of the area seems to be more closely related, at least for the flora, to the group of lime elevations from north of Sancti Spíritus to Loma de Cunagua in Ciego de Avila than with that of the cays of the Sabana-Camagüey Archipelago (Hernández, 1996). Basically, the biota resembles that of the Camagüey sector, which is older but with large areas of similar soils and lithologies. At the hypogean level, the fauna forms an interesting, endemic and relatively closed biotic unit.

Plant formations:

- (a) Evergreen microphytic coastal forest
- (b) Evergreen microphytic sub-coastal forest
- (c) Evergreen microphytic seasonally flooded forest
- (d) Mangrove
- (e) Coastal and sub-coastal xeromorphic matorral
- (f) Matorral on sandy coast
- (g) Halophyte communities with elements of mangrove
- (h) Vegetation on rocky coast
- (i) Coastal vegetation on sand
- (j) Secondary communities
- (k) Semi-deciduous forest

17. Noteworthy flora:

Endemic and Endangered Species

<i>Agave legrelliana jacovi</i>
<i>Ateleia apetala</i>
<i>Baccharis halimifolia</i> var. <i>angustior</i>
<i>Batis maritime</i>
<i>Broughtonia ortgesiana</i>
<i>Bucida subinermis</i>
<i>Bumelia conferta</i>
<i>Campylocentrum poeppigii</i>
<i>Ceiba pentandra</i>
<i>Chamaesyce centunculoides</i>
<i>Chascotheca neopeltandra</i>
<i>Coccothrinax litoralis</i>
<i>Copernicia baileyana</i>
<i>C. fallaensis</i>
<i>C. rigida</i> Britton and Wils.
<i>C. vespertilionum</i>
<i>Diospyrus grisebachii</i>
<i>Distictis gnaphalanth</i>
<i>Erythroxylum havanense</i>
<i>Ficus havanensis</i> Rossb.
<i>Guettarda calyptrate</i>
<i>Harrisia eriphora</i>

<i>Hyperbaena racemosa</i>
<i>Jacquinia aculeata</i>
<i>Leptocereus arboreus</i>
<i>Maytenus buxifolia</i>
<i>Oncidium guttatun</i>
<i>Philodendron clementis</i> Wr.
<i>Pilosocereus brooksianus</i>
<i>P. eriphora</i>
<i>P. robinii</i>
<i>Piper aduncum</i>
<i>Platygyne hexandra</i>
<i>Plumeria trinitensis</i> Britton
<i>Psychotria clementis</i>
<i>P. sagraeana</i>
<i>Rhipsalis cassutha</i>
<i>Roystonea regia</i>
<i>Securidaca elliptica</i>
<i>Selenicereus grandiflorus</i>
<i>Tabebuia shaferi</i> Britton
<i>Tillandsia usneoides</i>
<i>Zamia latifoliata</i>

18. Outstanding fauna:

<i>Amazona leucocephala</i>	Bahamas parrot ( <i>cotorra</i> )
<i>Aratinga euops</i>	Cuban parakett ( <i>catey</i> )
<i>Crocodylus acutus</i>	American crocodile
<i>Cyclura nubile</i>	Cuban ground iguana ( <i>iguana</i> )
<i>Grus canadensis</i>	sandhill crane ( <i>grulla</i> )
<i>Natalus lepius</i>	<i>murciélago mariposa</i>
<i>Noctilio leporinus</i>	<i>murciélago pescador</i>
<i>Phoenicopterus ruber</i>	American flamingo
<i>Phyllonycteris poeyi</i>	<i>murciélago de las cuevas calientes</i>
<i>Priotelus temnurus</i>	<i>tocororo</i>
<i>Trichechus manatus</i>	manatee

Mammals are represented in the wetland, mostly by several species of bats, the largest single taxonomic unit and greatest number of specimens, especially cave-dwelling bats. Among those that stand out are *Artibeus jamaicensis*, *Eptesicus fuscus*, *Macratus waterhousey*, *Tadarida brasiliensis* and colonies of *Phyllonycteris poeyi* (*murciélago de las cuevas calientes*), an endemic and endangered species. There are colonies of *murciélago pescador* (*Noctilio leporinus*), which is the largest species of Chiroptera living in Cuba and the only piscivorous species, and colonies of *Natalus lepidus*, the smallest bat in Cuba. Other mammals found here are the *jutía caraballí* (*Capromys prehensilis*) and *jutía conga* (*Capromys pilorides*), which is rare and restricted. There are also

isolated specimens of manatee (*Trichechus manatus*) and bottle-nosed dolphin (*tonina*) (*Tursiops truncatus*), the most common species of dolphin in Cuba.

19. Social and cultural values:

Archaeological values: The physical and geographical characteristics observed here, an area which long ago was much richer in fauna and flora, made possible settlement by pre-Columbian man here from 900–600 before present until the eighteenth century. This area was filled with sites. There are 36 archaeologically important indigenous sites, in which all categories of cultures that lived in the Cuban archipelago are represented. There were sites for settlement, rituals and funerals, with the densest area of sites in all of Cuba. Likewise, it has the greatest density of rupestrian art (pictographs and petroglyphs), with 284 examples in 17 caves and 27 murals of which 14 are local monuments. The amount and diversity of indigenous cultures existing in Cuba point out the enormous importance that this region takes on for conservation and study of the indigenous communities in the Cuban archipelago, which gives the wetland a singularity in the whole Caribbean area.

Socio-economic use of the area: Local inhabitants have traditionally used the natural resources of the wetland. The main economic activities at the site are farming, forestry, fishing, bee-keeping and recreation. These activities have negatively influenced conservation of the area, because they are traditional uncontrolled activities carried out in the past when there were still no environmental norms regulating these activities. This process has now begun to change because of reorganization of the central government administration, implementation of new legal norms regulating these activities, community support, approval of the wetland as a biosphere reserve and declaration of its nucleus as a national park.

20. Land tenure/ownership of:

At the site and in the surrounding areas, land is held by the government. The main landholders at the site are the Empresa Forestal Integral Sancti Espíritus, Empresa Pecuaria V Congreso, provincial delegation of CITMA Sancti Espíritus and Empresa Nacional para la Protección de la Flora y la Fauna. In the surrounding area, the main landholders are Complejos Agroindustriales Simón Bolívar, Obdulio Morales and Aracelio Iglesias, all belonging to the Ministry for Agriculture and MINAZ.

21. Current land use:

At the site	Surrounding area
Conservation (protected areas)	Growing of sugarcane
Natural forests (mangrove) and plantations (to a lesser extent) used for forestry management	Small crops (rice, grains, vegetables)
Extensive livestock raising (fattening of cattle)	Human settlements

Commercial fishing	Commercial fishing
Sport fishing	Sport fishing
Bee-keeping	Bee-keeping

22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects:

The following adverse factors affecting the wetland are related to human activity, either because of previous inadequate use of natural resources, inadequate management of the watershed or uncontrolled socio-economic use.

(a) Agriculture and forestry (the forestry management plan must be updated).

(b) Livestock raising is another land use. Large areas bordering the mangrove are used for grazing cattle. Entry of cattle for many reasons into the forest can seriously affect the soil structure through compaction and, above all, natural regeneration of the vegetation.

(c) Fishing, both commercial and non-commercial, adversely affects marine species through use of inadequate fishing techniques, overexploitation and violations of environmental regulations, while protection is very difficult because of a lack of means.

(d) Dumping of waste by the sugar industry and development of tourism incompatible with the characteristics of the area in its management category are other potential dangers at the site.

Other adverse factors related to a lack of management of the wetland and the threats described above are:

(a) The area has neither staff nor the means needed to guarantee protection of the natural resources there;

(b) Lack of equipment and tools;

(c) Lack of all the infrastructure necessary for management and protection;

(d) Economic pressures;

(e) Inaccessibility of several sectors.

23. Conservation measures taken:

Large parts of the wetland are managed as protected areas and have some type of legal recognition, either by the provincial governments or sectorial organisms that exploit the resources. Recently, through Agreement 4262, the Executive Committee of the Council of Ministers declared an important nucleus of biodiversity of the wetland the Caguanes National Park with an area of 20,490 hectares. The entire wetland is located in the Buenavista Biosphere Reserve, declared by UNESCO in January 2000. Furthermore, it is included in the Sabana-Camagüey Archipelago GEF/UNDP project, which will allow it



to monitor, strengthen protection and draft management plans for sustainable use of the natural resources of the wetland and greater awareness of the actors in the area.

#### 24. Conservation measures proposed but not yet implemented:

There is a series of programmes and plans prepared that have not been implemented; including:

- (a) Drafting or updating management plans of the protected areas included in the wetland;
- (b) Gathering of basic information for implementation of the management plan and coordination of the activities of all the parties linked to the management of the resources of the Buenavista biosphere reserve and conservation;
- (c) Updating of forest management plans and land use;
- (d) Drafting of a multi-sectorial strategy for protection of the wetland's resources.

It has been impossible to implement these measures for lack of material and financial resources, but this is now beginning to be resolved partially with allocations from the GEF/UNDP project for protection of biodiversity and sustainable development of the Sabana-Camagüey ecosystem. This project covers a whole region of that archipelago and seeks to strengthen management and planning capacities of the Cuban government at all levels, develop basic data on the ecosystem and initiate environmental education activities and awareness of decision-makers and communities linked to the ecosystem.

#### 25. Current scientific research and facilities:

For implementation of research activities, there are the following facilities:

- (a) A monitoring station in Caguanes National Park, and there are plans for construction of another station in the area of Caibarién;
- (b) A visitors' centre is being constructed in Caguanes National Park;
- (c) On Cayo Coco, there is the Centre for Coastal Research, which although outside the physical limits of the wetland participates in monitoring the site.

At the site, a group of research and monitoring projects are being carried out, whose main efforts are aimed at:

- (a) Gathering bibliographical information on the area and its natural resources;
- (b) Updating and expanding inventories of fauna and flora and preparation of taxonomic lists;
- (c) Updating and expanding the map of distribution of fauna;
- (d) Carrying out preliminary population and ecologic studies (habitat, distribution, density, relative abundance) of the following species:

<i>Aratinga euops</i>	Cuban parakeet ( <i>catey</i> )
<i>Capromys pilorides</i>	<i>jutía conga</i>

<i>Cyclura nubila</i>	Cuban ground iguana
<i>Grus canadensis nesiotis</i>	Cuban sandhill crane ( <i>grulla</i> )
<i>Mormopterus minutus</i>	<i>murciélago de las jatas</i>
<i>Mysateles prehensilis</i>	<i>jutía carabalí</i>
<i>Natalus lepidus</i>	<i>murciélago mariposa</i>
<i>Noctilio leporinus</i>	<i>murciélago pescador</i>
<i>Opistosiphon caguanensis</i>	
<i>O. detectum lucasense</i>	
<i>O. insularum</i>	
<i>Phoenicopterus ruber ruber</i>	American flamingo
<i>Phylonictes poeyi</i>	<i>murciélago de las cuevas calientes</i>
<i>Torrecoptis parvula</i>	
<i>Trichechus manatus</i>	manatee
<i>Xiphidiopicus percussus</i>	<i>carpintero verde</i>

- (e) Identifying species that require management;
- (f) Defining types of management to use and the areas needing management;
- (g) Monitoring bird populations that frequent the coastal lagoons;
- (h) Monitoring marine-coastal ecosystems (pollution, water quality and beach dynamics);
- (i) Building meteorological stations for obtaining climatic data;
- (j) Carrying out exploration of caverns in the area;
- (k) Surveying the caverns in the area;
- (l) Updating thematic cartography;
- (m) Creating and maintaining an updated database;
- (n) Making an inventory of the wetland's ecotourism attractions;
- (o) Carrying out studies to determine the carrying-capacity of the trails and other areas of public use;
- (p) Carrying out studies to determine the impact of public use on areas of Caguanes National Park;
- (q) Carrying out studies for marketing ecotourism in Caguanes National Park.

Many of these activities are already underway under the umbrella of the Sabana-Camagüey project. Others are planned for medium-term implementation. The main entities participating are the Centre for Coastal Research, the Biology Faculty of the University of Havana, the Institute for Ecology and Systematics and the Centres for Environmental Research of Sancti Spíritus and Villa Clara.

## 26. Current conservation education:

Several of the specialists in the area have participated in training courses on planning, management and environmental education. There are regular training courses for forest wardens, fisheries inspectors and management personal of the protected areas in the wetland. There is also an important number of environmental activities, including radio programmes and interest groups related to conservation of the wetland's resources for all segments of the population, especially with the students in the primary and secondary

schools. Every week, there is a one-hour listener-participation programme on the Sancti Spíritus provincial radio station on which topics related to the use of conservation and management of the wetland are dealt with. There is a programme of community environmental education called "Planeta Azul." The programme of environmental education is aimed primary at children and teenagers, seeking to transmit new knowledge about the development of natural processes through them to the rest of the family, creating environmental awareness that will promote sustainable use of natural resources that are currently used irrationally with serious effects on the environment. The result of all these activities is beginning to change the behaviour of the population towards the wetland.

#### 27. Current recreation and tourism:

Associated with use of the wetland for tourism is the Motel San José del Lago, in the town of Mayajigua, municipio of Yaguajay. In the surrounding areas, such as Cayo Santa María and Cayo Guillermo, there are plans for large-scale hotel development. The main form of tourism in the area surrounding the wetland is beach and sea tourism. In the future, it is hoped to attract tourists to this area for tourism more compatible with nature. The following tourist activities are carried out in the wetland: recreational diving, ecotourism, observation of wildlife, hiking, speleology, bicycling, health tourism and sport fishing. Domestic tourism has increased in the summer months, while visits by foreign tourists have remained constant year round.

#### 28. Jurisdiction:

From the legal point of view, jurisdiction lies with the provincial and municipal assemblies in the province of Villa Clara (municipio of Caibarién) and Sancti Spíritus (municipio of Yaguajay). Property is owned by the government. Its administration is the responsibility of the National Centre for Protected Areas through the environmental units of the provinces of Villa Clara and Sancti Spíritus and the administrations of the protected areas by both CITMA and the Empresa de Flora y Fauna in Villa Clara. Other entities dealing with fisheries and MINTUR participate in the administration.

#### 29. Management authority:

The following agencies are responsible for the administration and management of this large area.

Environmental management  
Ministerio de Ciencia, Tecnología y Medio Ambiente  
Delegación Provincial Sancti Spíritus  
Unidad de Medio Ambiente de Sancti Spíritus  
Coronel Legón, Sancti Spíritus  
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Management of forest resources

Ministerio de la Agricultura  
Servicio Estatal Forestal  
Carretera del Jíbaro, kilómetro 2  
Sancti Spíritus  
Tel.: (53 41) 23 074

Management of fisheries  
Cooperativa Pesquera Vitoria, Playa Vitoria, Yaguajay  
Sancti Spíritus

Administration and management of protected areas  
Ministerio de Agricultura  
Unidad Territorial Empresa para la Protección de la Flora y la Fauna  
Carretera Meneses-Yaguajay, kilómetro 11/2, Yaguajay  
Sancti Spíritus  
Tel.: (53 41) 52 678

Management of forest resources  
Ministerio de Agricultura  
Empresa Forestal Integral Sancti Spíritus  
Máximo Gómez 55, Sancti Spíritus  
Tel.: (53 41) 52 116

Management of livestock  
Ministerio de la Agricultura  
Subdelegación de Ganadería  
Carretera del Jíbaro kilómetro 2  
Sancti Spíritus  
Tel.: (53 41) 22 380  
Fax: (53 41) 22 380

Management of tourism  
Ministerio del Turismo  
Delegación Provincial  
Vicente Suyama 13, Trinidad  
Sancti Spíritus  
Tel.: (53 41) 96 43  
Fax: (53 41) 96 377

30. References: