



Ramsar Information Sheet

Published on 13 July 2016

Update version, previously published on : 8 November 2005

Japan

Nagura Amparu

ramsar

Designation date	8 November 2005
Site number	1550
Coordinates	24°23'43"N 124°08'46"E
Area	157,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

Nagura Amparu is located at the mouth of Nagura River in the western part of Ishigaki Island. It falls within the Wildlife Protection Area. Nagura Amparu is also known as Iriomote-Ishigaki National Park. Tidal flats and mangrove forests extend in the wetland and formulate typical subtropical ecosystem which is composed of diverse organisms including benthos, shellfish and fish juvenile. Therefore, this site provides a stop-over habitat and/or wintering habitat for migratory birds such as shorebirds and also provides habitats for forest bird species and the Crested Serpent Eagle (*Spilornis cheela perplexus*) - endemic subspecies to Yaeyama islands.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Name	Mr. Manabu Nishimura
Institution/agency	Naha Nature Conservation Office, Kyushu Regional Environmental Office, Ministry of the Environment
Postal address	1-15-15 Higawa, Naha-shi, Okinawa-ken, 900-0022 JAPAN.
E-mail	NCO-NAHA@env.go.jp
Phone	+81-98-836-6400
Fax	+81-98-836-6401

2.1.2 - Period of collection of data and information used to compile the RIS

From year	1979
To year	2014

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Nagura Amparu
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2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary	Yes <input type="radio"/> No <input checked="" type="radio"/>
(Update) B. Changes to Site area	No change to area

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	Yes (actual)
(Update) Are the changes	Positive <input type="radio"/> Negative <input type="radio"/> Positive & Negative <input checked="" type="radio"/>
(Update) No information available	<input checked="" type="checkbox"/>
(Update) Changes resulting from causes operating within the existing boundaries?	<input checked="" type="checkbox"/>
(Update) Please describe any changes to the ecological character of the Ramsar Site, including in the application of the Criteria, since the previous RIS for the site.	Criteria 2 and 4 were added as a result of review of relevant information.
(Update) Is the change in ecological character negative, human-induced AND a significant change (above the limit of acceptable change)	Yes <input type="radio"/>

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<1 file(s) uploaded>

Boundaries description (optional)	The boundary follows geopolitical boundary for local government jurisdiction and physical boundaries such as roads (prefectural route 208 and 211) and river back of water area.
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2.2.2 - General location

a) In which large administrative region does the site lie?	Ishigaki City
b) What is the nearest town or population centre?	Naha City, Okinawa Prefecture

2.2.3 - For wetlands on national boundaries only

RIS for Site no. 1550, Nagura Amparu, Japan

a) Does the wetland extend onto the territory of one or more other countries? Yes No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):

Area, in hectares (ha) as calculated from GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	The Palaearctic Realm, Ryuku islands, Mixed Island System

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

- Criterion 1 : Representative, rare or unique natural or near-natural wetland types

Other reasons Nagura Amparu includes the largest scale of the representative mangrove forests in the Ryukyu Island biogeographic region where the northern edge of the mangrove forest is distributed.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity







Justification A total of seven mangrove species are found in the Ryukyu Islands. Nagura Amparu, located in Yaeyama Islands, has six mangrove species: *Kandelia obovata*, *Bruguiera gymnothiza*, *Rhizophora mucronata*, *Avicennia marina*, *Lumnitzera racemosa*, and *Sonneratia alba* except *Nypa fruticans* that is distributed only at two sites in Iriomote Island. Such environment supports various and abundant benthos including *Terebralia palustris*, *Paratya compressa* and *Caridina propingua*, and fishes. Therefore, many and a variety of birds (141 species) including shorebirds such as Black-winged Stilt (*Himantopus himantopus*) and Common Redshank (*Tringa totanus*), forest birds such as Crested Serpent Eagle (*Spilornis cheela perplexus*), insects (several hundreds to 1000 species), amphibians (11 species), lizards (10 species), snakes (10 species) and terrestrial turtles (two species) inhabit this site.

- Criterion 4 : Support during critical life cycle stage or in adverse conditions

- Criterion 7 : Significant and representative fish

Justification This site supports the whole life cycle of crustacean species including freshwater shrimps, *Neocaridina ishigakiensis*, *Neocaridina brevisrostris* and *Ryukyum yaeyamense*, which are endemic to Ishigaki Island and Iriomote Island.

3.2 - Plant species whose presence relates to the international importance of the site

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Avicennia marina</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	EN on Japan Red List	
<i>Bruguiera gymnorhiza</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Kandelia obovata</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Lumnitzera racemosa</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	CR on Japan Red List	
<i>Rhizophora mucronata</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Sonneratia alba</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7								
CHORDATA/ AVES	<i>Anser albifrons</i>	Greater White-fronted Goose	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		Key staging area
CHORDATA/ AVES	<i>Anser fabalis</i>	Bean Goose	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	VU on Japan Red List, Natural Monument designated by the Government of Japan	Key staging area
ARTHROPODA/ MALACOSTRACA	<i>Caridina brevisrostris</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
ARTHROPODA/ MALACOSTRACA	<i>Caridina propinqua</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Himantopus himantopus</i>	Black-winged Stilt	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	VU on Japan Red List	Key staging area
CHORDATA/ AVES	<i>Numenius madagascariensis</i>	Eastern Curlew;Far Eastern Curlew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VU on Japan Red List, Natural Monument designated by the Government of Japan	Key staging area
CHORDATA/ AVES	<i>Numenius minutus</i>	Little Curlew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	EN on Japan Red List, Natural Monument designated by the Government of Japan	Key staging area
ARTHROPODA/ MALACOSTRACA	<i>Paratya compressa</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Platalea minor</i>	Black-faced Spoonbill	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EN on Japan Red List, Natural Monument designated by the Government of Japan	A stop-over habitat
ARTHROPODA/ MALACOSTRACA	<i>Ryukyum yaeyamense</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Spilornis cheela perplexus</i>	Crested Serpent Eagle	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		Subspecies endemic to Yaeyama Islands. The population size was estimated at only 110 individuals by the latest counting survey (Ministry of Environment, 2012). This subspecies depends on this site for feeding and breeding throughout the year.
CHORDATA/ AVES	<i>Tadorna tadorna</i>	Common Shelduck	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		Key staging area
MOLLUSCA/ GASTROPODA	<i>Terebralia palustris</i>	mangrove whelk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Tringa totanus</i>	Common Redshank	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	VU on Japan Red List, Natural Monument designated by the Government of Japan	Key staging area

More on Criterion 7: This site supports the whole life cycle of species such as *Neocaridina ishigakiensis*, *Neocaridina brevisrostris* (Mentioned in the list as *Caridina brevisrostris*) and *Ryukyum yaeyamense*, which are endemic to Ishigaki Island and Iriomote Island.

3.4 - Ecological communities whose presence relates to the international importance of the site

<no data available>

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

Diverse natural environment such as mangrove forests and tidal flats which are typical in the subtropical region are distributed in Nagura Amparu. A variety of benthos, including shellfishes and crustaceans, and fish juveniles are abundant in this site. Migratory shorebirds and ducks use this site for feeding and resting because this site provides quiet and safe spaces for them. The Crested Serpent Eagle (*Spilornis cheela perplexus*) which is endemic subspecies to Yaeyama Islands uses open fields in this site for feeding.

4.2 - What wetland type(s) are in the site?

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
F: Estuarine waters		3		
G: Intertidal mud, sand or salt flats		1		
I: Intertidal forested wetlands		2		Representative

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Acrostichum aureum</i>		CR on Japan Red List
<i>Limonium virgatum</i>		VU on Japan Red List
<i>Nymphoides coreana</i>		VU on Japan Red List
<i>Rhynchospora malasica</i>		EN on Japan Red List

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range / endemism/other
CHORDATA/AVES	<i>Chalcophaps indica</i>	Common Emerald Dove				c.i.yamashinai - EN on Japan Red List
CHORDATA/AVES	<i>Pavo cristatus</i>	Common Peafowl; Indian Peafowl				Alien species
CHORDATA/AVES	<i>Phasianus colchicus</i>	Common Pheasant; Ring-necked Pheasant				Alien species

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfa: Humid subtropical (Mild with no dry season, hot summer)

Annual temperature fluctuation is small. Annual mean temperature is 23.9 degrees Celsius. Temperature ranged between 18.3 and 29.3 degrees Celsius (average temperature range between 2000 and 2010 on Ishigaki Island. Annual precipitation is 2,195 mm (average between 2005 and 2010).

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

Lower part of river basin

Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Nagura River

4.4.3 - Soil

Mineral

(Update) Changes at RIS update No change Increase Decrease Unknown

Organic

(Update) Changes at RIS update No change Increase Decrease Unknown

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes No

Please provide further information on the soil (optional): Soil type: Acid sulphate soil, alluvial soil, Kunigami-Maaji soil.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	<input checked="" type="checkbox"/>	No change
Marine water	<input checked="" type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels fluctuating (including tidal)	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology: Nagura-Amparu and the Nagura plains (including rice paddies and agricultural fields distributed around it) in the Nagura river basin depend on the water from the Omotodake mountain - highest mountain in Okinawa Prefecture (elevation: 525.6 m) that is located on the north of Ishigaki Island. Water depth ranges from 82 to 114 cm at high tide.

4.4.5 - Sediment regime

(Update) Changes at RIS update No change Increase Decrease Unknown

(Update) Changes at RIS update No change Increase Decrease Unknown

(Update) Changes at RIS update No change Increase Decrease Unknown

(Update) Changes at RIS update No change Increase Decrease Unknown

Sediment regime unknown

Please provide further information on sediment (optional): Alluvium of soft silt and clay distribute from river mouth to the upstream riverbed up to 3km. New sand dune layers composed by bits of mundane coral reef sediment are distributed along the coast.
As a result of sedimentation in the depressed area along the coastline, mangrove forests and a sand spit were developed, which formed a lagoon as a whole.

4.4.6 - Water pH

(Update) Changes at RIS update No change Increase Decrease Unknown

(Update) Changes at RIS update No change Increase Decrease Unknown

Alkaline (pH>7.4)

(Update) Changes at RIS update No change Increase Decrease Unknown

Please provide further information on pH (optional): pH 7.6 ~ 8.2 at Nagura Ohashi Bridge (2012)

4.4.7 - Water salinity

(Update) Changes at RIS update No change Increase Decrease Unknown

Mxohaline (brackish)/Mxosaline (0.5-30 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

(Update) Changes at RIS update No change Increase Decrease Unknown

(Update) Changes at RIS update No change Increase Decrease Unknown

Please provide further information on salinity (optional): Being developed at the mouth of Nagura River, this site is a brackish water area affected by fresh water from rivers and sea water flow by tide.

(EOD) Dissolved gases in water DO 5.6 - 8.7 at Nagura Ohashi Bridge (2012).

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

(EOD) Dissolved organic carbon BOD < 0.5 ~ 0.8 mg/L at Nagura Ohashi Bridge (2012).

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar ii) significantly different site itself.

Surrounding area has more intensive agricultural use

Please describe other ways in which the surrounding area is different: The surrounding area of Nagura Amparu are pastures and agricultural fields of sugar cane and rice paddies. In addition, there are some factories and houses, and part of the water in the catchment is used for industry.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	High

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Erosion protection	Soil, sediment and nutrient retention	Medium
Hazard reduction	Flood control, flood storage	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Water sports and activities	Medium
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Nature observation and nature-based tourism	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Spiritual and inspirational	Aesthetic and sense of place values	Medium
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium
Scientific and educational	Major scientific study site	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	High

Other ecosystem service(s) not included above:

More on Provisioning services: Since ancient times, Nagura Amparu has been an important place of food supply. Formally shells and crabs such as mangrove crabs (*Scylla* species) were collected for food, and at present *Gafrarium tumidum* Röding is collected. Fishing is also done though not often.

More on Scientific and Educational services: Takeharu Kosuge, Visiting Professor, the Open University of Japan has conducted field surveys on shellfishes at Nagura Amparu and first recorded *Barrimysia siphonsonae* in Japan in 2008, *Bivalve Litigiella pacifica* n. sp at Amparu in 2006, *Colsymola Hanzawai* n. com as living body in Japan in 2008. He has also conducted research on mass generation of *Terebralia palustris* at Amparu (its northern limit) in 2005.

More on Cultural services: An old folksong about the ecology of various crabs in Nagura Amparu is handed down from the past in Ishigaki Island. In addition, traditional horse racing event has been held since old times.

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes No Unknown

4.5.2 - Social and cultural values

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
Provincial/region/state government	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Local authority, municipality, (sub)district, etc.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Public land (unspecified)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

Within the Ramsar Sites: public water 60 ha, nationally owned land 29 ha, prefectural land (Okinawa Prefecture) 1 ha, city-owned land (Ishigaki City) 2 ha, private land 15 ha.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Naha Nature Conservation Office, Kyushu Regional Environmental Office, Ministry of Environment

Provide the name and title of the person or people with responsibility for the wetland:

Mr. Manabu Nishimura

Postal address:

1-15-15 Higawa, Naha-shi, Okinawa-ken, 900-0022 JAPAN.

E-mail address:

NCO-NAHA@env.go.jp

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dams and water management/use	Medium impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Vegetation clearance/land conversion	Medium impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/alien species	Low impact		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Agricultural and forestry effluents	Medium impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

More on Dams and Water Management/use: Decrease of outflow water to Nagura River and Nagura Amparu has been observed because of Nagura dam that constructed in Bunera River, a tributary of Nagura River, in 1998. Owing to the decrease of water flow, it is concerned that more sediment than before is likely to be deposited that, in turn, may flow down all at once by rainfall.

More on Vegetation clearance/land conversion: Tuff loam caused by city planning projects and from sugarcane field has been flowing into Nagura Amparu and Nagura Bay.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Special Area of National Park	Special Area within Iriomote Ishigaki National Park		whole
Special Protection Area of National Wildlife Protection Area	Nagura Amparu Special Protection Area within the Nagura Amparu National Wildlife Protection Area		whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Yaeyama Island		whole
Other non-statutory designation	Nagura Bay and Nagura River Basin (500 important wetlands in Japan(2002))		whole

5.2.3 - IUCN protected areas categories (2008)

II National Park: protected area managed mainly for ecosystem protection and recreation

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Human Activities

Measures	Status
Harvest controls/poaching enforcement	Implemented
Communication, education, and participation and awareness activities	Partially implemented
Research	Partially implemented

Other:

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site? Yes No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

Nature observation is incorporated into school curriculum of elementary schools and junior high schools in Ishigaki City, as well as school trips from prefectures outside Okinawa Prefecture.

Local organizations such as Ishigaki branch of Japan Wild Bird Society provide bird watching walks periodically.

Ishigaki Island Youth Outdoor Learning Center organizes canoeing events for schoolchildren.

Ishigaki City government develops brochures and distribute them to elementary schools and junior high schools in Ishigaki City to provide interpretive information on the nature of Nagura Amparu and raise awareness of good visiting manners.

Nagura Elementary School and Junior High School located in Amparu area have held cleaning activities and nature observation events as school curriculums for environmental education for more than 20 years.

Sign boards explaining the parking lots and Nagura Amparu are installed for the visitors at the north end of Nagura-Ohashi Bridge.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Please select a value

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Implemented
Soil quality	Implemented
Animal community	Implemented

2005-2009: "Explication of soil nutrient dynamics in the river basin and integrated management techniques in the subtropical basin", Scientific Research Fund, Representative: Shunsuke Ikeda, Tokyo Institute of Technology.

2010: "Research on the quality of water in the rivers in Ishigaki, Yaeyama Islands, influence by rainfall event", Koderu Laboratory, Hosei University.

2012: "Coral reef, history of landscape on human ecology", Ministry of Education, Culture, Sports, Science, and Technology Grants-in-Aids for Scientific Research, BO2 group, representative: Toru Yamaguchi, Professor, Faculty of Letters, Keio University.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Ministry of the Environment, the Government of Japan, 2004, Designation Plan of Special Protection Area of Nagura Amparu National Wildlife Protections Area;
Ministry of the Environment, the Government of Japan, 1995, The Fifth National Survey on the Natural Environment Report on Wetland Survey;
Ministry of the Environment, the Government of Japan, 2002, 500 Important Wetlands in Japan;
Ministry of the Environment, the Government of Japan, 2014, Red Data Book;
Okinawa Prefecture, The 22nd Report on the investigation of cultural property;
Board of Education, Okinawa Prefecture 1979, Archaeological remains of Ishigaki Island.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Nagura Amparu (Ministry of Environment, the Government of Japan, 10-02-2013)



Nagura Amparu (Ministry of Environment, the Government of Japan, 25-09-2014)

6.1.4 - Designation letter and related data

Designation letter

<no file available>

Transboundary Designation letter

<no file available>

Date of Designation 2005-11-08