



Ramsar Information Sheet

Published on 29 April 2020

Update version, previously published on : 1 January 2007

Georgia Ispani Mire



Designation date	7 February 1997
Site number	894
Coordinates	41°51'24"N 41°48'05"E
Area	782,70 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

The landscape of the Ramsar Site is divided into two parts: Ispani II northern part and Ispani I SW part. Ispani II is impenetrable, only its margin area was used for cattle grazing and logging. Thus, this peatland is preserved in a nearly pristine state. In Ispani I, peat extraction and drainage works were ongoing since the 1930. Despite its degradation, autonomous regeneration with former peatland vegetation, like Sphagnum, partly occurs. The Ispani I & II complex represents a valuable site of landscape heritage. Almost half is covered by the Ispani II percolation bog preserved in its almost original state: the only mire described so far as a percolation bog within the classification system of hydro-genetic mire types. Here, the water level hardly drops and the peat remains weakly decomposed, with large pores and elastic. Normally this only occurs with groundwater feeding. In the Kolkheti lowland rainfed percolation mires occur because the climate is humid and the precipitation surplus is evenly distributed over the year. The bog has a convex shape without clear hummocks nor hollows, because surface patterning depends on lateral water flow. The vegetation is acid and more nutrient demanding than in 'normal' bogs. Peat is hardly decomposed over a large depth. Extremely high mire oscillation with a maximum rise up to 25 cm can occur. This landscape uniformity and lack of diversity is a reference when looking at global peatland diversity. Combination of percolation and ombrogenous bogs creates the uniform character of Kolkheti mires, a reference in comparison with polygon mires of the northern hemisphere. The Ispani peatland complex is important also for its floristic composition. Most of the vegetation cover is peat moss (Sphagnum) species plus a low density of vascular plants with Boreal (tundra and taiga) flora elements like *Drosera rotundifolia*, *Sphagnum imbricatum* and Colchic flora elements like *Rhododendron ponticum* and *R. luteum*.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Mariam Sul Khanishvili
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2.1.2 - Period of collection of data and information used to compile the RIS

From year	2013
To year	2018

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Ispani Mire
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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 checked="" type="radio"/> No <input type="radio"/>
(Update) The boundary has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The boundary has been extended	<input checked="" type="checkbox"/>
(Update) The boundary has been restricted	<input type="checkbox"/>
(Update) B. Changes to Site area	the area has increased
(Update) The Site area has been calculated more accurately	<input checked="" type="checkbox"/>
(Update) The Site has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The Site area has increased because of a boundary extension	<input type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<input type="checkbox"/>

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?	Not evaluated
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2.2 - Site location

2.2.1 - Defining the Site boundaries

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

Former maps	0
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Boundaries description

The boundary is the same as of the existing Kobuleti protected areas and their national protection status: Kobuleti State Nature Reserve and Kobuleti Managed Reserve.

2.2.2 - General location

a) In which large administrative region does the site lie?	Adjara
b) What is the nearest town or population centre?	Kobuleti

2.2.3 - For wetlands on national boundaries only

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
EU biogeographic regionalization	Black Sea

Other biogeographic regionalisation scheme

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 Ispani II mire is one of the two percolation bogs which have been discovered world wide (another one is Imnati, which also occurs in the Kolkheti lowland).

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification The site supports populations of plants/animals important for maintaining the biological diversity of this particular biogeographic region. Ispani II and Ispani I (partly) are dominated by Sphagnum papillosum, S. imbricatu, and S. palustre and also Alder forest and Juncetum habitats. The vegetation further compiles amazingly few species, including Molinia litoralis, Rhynchospora alba, R. caucasica, Rhododendron ponticum, R. luteum, Vaccinium arctostaphylos, Drosera rotundifolia. This monotony makes Ispani II to a paradigm example of low internal diversity that contributes substantially to global ecosystem biodiversity.

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

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>Alnus glutinosa barbata</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Carex lasiocarpa</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		
<i>Drosera rotundifolia</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		
<i>Frangula alnus</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		
<i>Molinia caerulea</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Rhododendron caucasicum</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Rhododendron luteum</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Rhododendron ponticum</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Rhynchospora alba</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		
<i>Sphagnum imbricatum</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Sphagnum palustre</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Sphagnum papillosum</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Sphagnum rubellum</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Vaccinium arctostaphylos</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 1)	IUCN Red List	GITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
Birds																		
CHORDATA/AVES	<i>Anser erythropus</i>	Lesser White-fronted Goose	<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	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Aquila heliaca</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	site supports this species during migration with the resting place and food	
CHORDATA/AVES	<i>Ardea alba</i>	Great Egret	<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"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I, EU Bird Directive	
CHORDATA/AVES	<i>Grus grus</i>	Common Crane	<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"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	site supports this species during migration with the resting place and food	
CHORDATA/AVES	<i>Haliaeetus albicilla</i>	White-tailed Eagle	<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"/>				LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Marmaronetta angustirostris</i>	Marbled Duck	<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	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Neophron percnopterus</i>	Egyptian Vulture	<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	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Oxyura leucocephala</i>	White-headed Duck	<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	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
CHORDATA/AVES	<i>Vanellus gregarius</i>	Sociable Lapwing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	site supports this species during migration with the resting place and food	
Fish, Mollusc and Crustacea																		
CHORDATA/ACTINOPTERYGII	<i>Cyprinus carpio</i>	Amur carp	<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	<input type="checkbox"/>	<input type="checkbox"/>		
Others																		
CHORDATA/MAMMALIA	<i>Lutra lutra</i>	European Otter	<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"/>				NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

1) Percentage of the total biogeographic population at the site

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

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Alder forest (<i>Alnus barbata</i>)	<input type="checkbox"/>	associated with <i>Frangula alnus</i> , <i>Rubus spec.</i> , <i>Pteridium aquilinum</i> .	
Juncetum	<input type="checkbox"/>	with <i>Juncus effusus</i> , <i>Hypericum mutilum</i> , <i>Polygonum thunbergii</i> , <i>Bidens tripartita</i>	
sphagnetum	<input checked="" type="checkbox"/>	Sphagnum dominated with vascular plant species: Species like <i>Sphagnum papillosum</i> , <i>S. palustre</i> , <i>S.imbricatum</i> , <i>S. rubellum</i> , <i>Molinia litoralis</i> , <i>Fragnula alnus</i> , <i>Rhododendron luteum</i> , <i>Rhododendron ponticum</i> , <i>Osmunda regalis</i> , <i>Vaccinium arctostaphylyus</i> ,	Most of the sphagnum species are of northern (boreal) origin, they penetrated into Kolkheti in Quaternary glacial epochs, the greatest importance of the community is the carbon storgae

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

4.1 - Ecological character

The recent peat land system of Ispani I and II originated by the terrestrialisation of a former lake. The age of the deepest lake deposits are estimated as at 4605±39 years BP. A minerotrophic water influenced fen period started at 1773±34 years BP and peat layers of 1 m with remnants of *Molinia* and partly peat mosses accumulated. The bog phase began 1021 +33 BP. That upper layer is formed by up to 6 m peat moss peat. It is a dome-shaped *Sphagnum* mire only fed by precipitation. The hardly decomposed and highly permeable peat over its whole depth allows the water to percolate through the whole peat body. It has a smooth surface with *Sphagnum* dominated vegetation. From a geomorphological point of view, the area of the site comprises the north-eastern part of the Kobuleti coastal plain. The warm humid climate is characterized by continuous high precipitation, high air humidity (80%) with high mean annual temperature (14.1°C) and hardly any frost. Rivers Togoni and Shavi-Ghele run across the Kobuleti Protected Areas. Both rivers take their rise on the hilly strip. They are characterized by the low discharges. From a geo-morphological point of view, the Ispani mires comprise the northeastern part of the Kobuleti coastal plain. In its turn, the Kobuleti coastal plain is located in the south-westernmost part of the Kolkheti Lowlands. Ispani mire is bordered in the East by a hilly strip of the north-eastern slope of the Chakvi ridge, in the North by the flat alluvial plain of Natanebi that slightly slopes towards the Black Sea, in the South by parts of the peat land Ispani 1, and in the West by a strip of sand-pebble dunes stretched along the coast. The width of the latter is about 200-300 m, and the height 4-6 m above sea level. The town of Kobuleti is developed on the surface of the coastal dunes. Kobuleti coastal plain has a humid sea subtropical climate. The mean annual temperature is about + 14°C, the mean temperature in August being 22–23,5°C, and the mean temperature in January varying within +6+ and + 6,5°C. The total annual precipitation is 2500 mm with the maximal occurring in autumn and winter. Westerly winds predominate within the year. Easterly winds predominate in cold seasons. The mean annual wind velocity is 2.6 m/sec. The Kobuleti coastal plain consists mainly of hydromorphous and alluvial soils due to abundant rainfall and the relief of the plain. Within the Ramsar Site, wet peat and silty soils are found, whereas the areas along the northern and eastern borders are mainly composed of podsol and alluvial soils.

The main habitats are:

- Sphagnetum: *Sphagnum* dominated with vascular plant species like *Sphagnum papillosum*, *S. palustre*, *S. imbricatum*, *S. rubellum*, *Molinia litoralis*, *Fragula alnus*, *Rhododendron luteum*, *Rhododendron ponticum*, *Osmunda regalis*, *Vaccinium arctostaphylyus*, *Drosera rotundifolia*, *Rhynchospora alba*, *Rhynchospora caucasica* occur.
- Alder forest (*Alnus barbata*) associated with *Frangula alnus*, *Rubus spec.*, *Pteridium aquilinum*.
- Juncetum: with *Juncus effusus*, *Hypericum mutilum*, *Polygonum thunbergii*, *Bidens tripartita*

Main vegetation types are Sphagnetum, dispersed Sphagnetum, heavily degraded wet alder-tree forests, secondary vegetation types: secondary meadow-shrubbery and artificial forests.

The existence of boreal (tundra and taiga) flora elements like *Drosera rotundifolia*, *Sphagnum imbricatum* which is rather unusual phenomenon for subtropical latitudes, as well as Colchic flora elements like *Rhododendron ponticum*, *R. luteum* is another feature of the uniqueness of this peatland.

The Ispani I and Ispani II peatland complex is an important stop-over site for migration birds.

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

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		2		
Fresh water > Marshes on peat soils >> U; Permanent Non-forested peatlands		1		Unique
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		3		
Fresh water > Marshes on inorganic soils >> X: Freshwater, tree-dominated wetlands				

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
7: Excavations				
9: Canals and drainage channels or ditches		4		

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Carpinus betulus</i>		Along the rivers Togoni and Shavi Ghele on dry places
<i>Crataegus microphylla</i>		Along the rivers Togoni and Shavi Ghele
<i>Hedera colchica</i>		Along the rivers Togoni and Shavi Ghele
<i>Menyanthes trifoliata</i>		boreal mire flora element
<i>Pterocarya pterocarpa</i>		Along the rivers Togoni and Shavi Ghele on dry places
<i>Quercus robur imeretina</i>		Along the rivers Togoni and Shavi Ghele
<i>Rhamphicarpa medwedewii</i>		
<i>Smilax excelsa</i>		Along the rivers Togoni and Shavi Ghele
<i>Viburnum opulus</i>		Along the rivers Togoni and Shavi Ghele
<i>Vitis labrusca</i>		Along the rivers Togoni and Shavi Ghele

Invasive alien plant species

Scientific name	Common name	Impacts	Changes at RIS update
<i>Ambrosia artemisiifolia</i>		Actually (major impacts)	No change
<i>Juncus acutus</i>		Actually (major impacts)	No change

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/AMPHIBIA	<i>Bufo verrucosissimus</i>	Caucasian Toad				
CHORDATA/MAMMALIA	<i>Canis aureus</i>	Golden Jackal				
CHORDATA/AVES	<i>Circus cyaneus</i>	Northern Harrier				
CHORDATA/AVES	<i>Egretta garzetta</i>	Little Egret				
CHORDATA/REPTILIA	<i>Emys orbicularis</i>					
CHORDATA/MAMMALIA	<i>Erinaceus concolor</i>	eastern European hedgehog;Southern White-Breasted Hedgehog				
CHORDATA/AVES	<i>Falco vespertinus</i>	Red-footed Falcon				
CHORDATA/MAMMALIA	<i>Felis silvestris</i>	Wildcat				
CHORDATA/AMPHIBIA	<i>Hyla arborea</i>					
CHORDATA/REPTILIA	<i>Lacerta agilis</i>					
CHORDATA/REPTILIA	<i>Lacerta media</i>					
CHORDATA/AMPHIBIA	<i>Lissotriton vulgaris</i>					
CHORDATA/AVES	<i>Lymnocyptes minimus</i>	Jack Snipe				
CHORDATA/MAMMALIA	<i>Meles meles</i>	European Badger				
CHORDATA/AVES	<i>Merops apiaster</i>	European Bee-eater				
CHORDATA/MAMMALIA	<i>Mus musculus</i>	House Mouse				
CHORDATA/MAMMALIA	<i>Mustela nivalis</i>	Least Weasel				
CHORDATA/MAMMALIA	<i>Myocastor coypus</i>	Coypu;nutria				
CHORDATA/MAMMALIA	<i>Myotis blythii</i>	lesser mouse-eared bat;Lesser Mouse-eared Myotis				
CHORDATA/REPTILIA	<i>Natrix natrix</i>					
CHORDATA/REPTILIA	<i>Natrix tessellata</i>					
CHORDATA/AMPHIBIA	<i>Pelophylax ridibundus</i>					
CHORDATA/MAMMALIA	<i>Pipistrellus pipistrellus</i>	Common Pipistrelle				
CHORDATA/AMPHIBIA	<i>Pseudepidalea viridis</i>					
CHORDATA/MAMMALIA	<i>Rattus norvegicus</i>	Brown Rat;Norway Rat				
CHORDATA/MAMMALIA	<i>Rattus rattus</i>	Roof Rat				
CHORDATA/ACTINOPTERYGII	<i>Silurus glanis</i>	Sheatfish;Sheatfish				
CHORDATA/MAMMALIA	<i>Sorex volnuchini</i>	Caucasian Pygmy Shrew				
CHORDATA/ACTINOPTERYGII	<i>Squalius cephalus</i>	European chub				
CHORDATA/AMPHIBIA	<i>Triturus cristatus</i>					
CHORDATA/REPTILIA	<i>Zamenis longissimus</i>					

4.4 - Physical components

4.4.1 - Climate

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

The warm humid climate is characterized by continuous high precipitation (2500 mm a-1), high air humidity (80%) with high mean annual temperature (14.1°C) and hardly any frost.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

Entire river basin

- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in 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.

The area of the site comprises the north-eastern part of the Kobuleti coastal plain. In its turn, the Kobuleti coastal plain is located in the south-westernmost part of the Kolkheti Lowlands.
 Rivers: Togoni and Shavi ghele
 Sea: Black Sea

4.4.3 - Soil

Organic

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

No available information

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)

Within the Ramsar-site itself, mainly peat-boggy and silt-boggy soils are found.

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 type="checkbox"/>	No change
Water inputs from rainfall	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
Unknown	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

Rivers Togoni and Shavi-Ghele run across the Kobuleti Protected Areas. Both rivers take their rise on the hilly strip. They are characterized by the low discharges because of the small size of their river basins.

4.4.5 - Sediment regime

Sediment regime unknown

4.4.6 - Water pH

Unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l)

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

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Unknown

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 greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

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)	Medium
Fresh water	Drinking water for humans and/or livestock	High
Wetland non-food products	Peat	Medium
Wetland non-food products	Livestock fodder	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Low
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climactic processes	High
Hazard reduction	Flood control, flood storage	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium
Scientific and educational	Educational activities and opportunities	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Nutrient cycling	Carbon storage/sequestration	High

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

- i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland
- ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland
- iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples
- iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

<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
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

5.1.2 - Management authority

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

Administration of the Kobuleti State Nature Reserve, Managed Reserve and Multiple Use Area

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

Mr. Revaz Moistsarapashili, Director of Administration of the Kobuleti State Nature Reserve

Postal address:

4 Leselidze str. 6200, Kobuleti, Georgia

E-mail address:

knrknr@mail.ru

5.2 - Ecological character threats and responses (Management)

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

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Drainage	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Canalisation and river regulation	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Natural system modifications

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

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Managed Reserve	Kobuleti Managed Reserve		whole
State Nature Reserve	Kobuleti State Nature Reserve		whole

5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation

VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Hydrology management/restoration	Proposed

Species

Measures	Status
Threatened/rare species management programmes	Proposed
Control of invasive alien plants	Proposed

Human Activities

Measures	Status
Research	Implemented
Communication, education, and participation and awareness activities	Implemented

Other:

- Demarcation of boundaries of Kobuleti Protected areas was finalized.
- Biodiversity monitoring programme was developed;
- Administrations Kobuleti Protected areas have been properly equipped;
- Interpretation Demonstration Project was developed;
- Infrastructure has been planned.
- Ispani mires (hydrology, vegetation, anthropogenic impact (grazing, fire), peat stratigraphy) were studied in detail by scientists from the Greifswald University Institute of Botany.
- Mire School in Kobuleti (May, 2005) has been conducted.
- The administrative center of protected areas has been built and has been already functioning

Restoration of forest ecosystems et development of the mire restoration project proposed but not yet implemented.

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

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Plant species	Implemented
Animal community	Implemented
Water regime monitoring	Proposed

Monitoring of Biodiversity, Water regulation (water level fluctuation), anthropogenic impact, control of invasive species proposed but not yet implemented.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Management Plan Kobuleti State Nature Reserve and Management Reserve.
 Joosten, H. & Succow, M. (2001): Hydrogenetische Moortypen. In: Landschaftsökologische Moorkunde. (editors, M. Succow & H. Joosten).pp. 235 - 240. Stuttgart: Schweizer- bart'sche Verlagsbuchhandlung.
 Joosten, H., Kaffke, A. & Matchutadze, I. (2003): The mires of the Kolkheti lowlands (Georgia). IMCG Newsletter 2003/3: pp. 19 - 23.
 Kaffke,A., Couwenberg,J., Joosten,H., Matchutadze,I. & Schulz,J. (2000) Ispani 2: The world's firstpercolation bog. Crowe, A., Campeau, S., and Rubec, L. - p. 487, Québec. Québec 2000 Millenium wetland event. Program with abstracts.
 Kaffke, A., Matchutadze, I., Couwenberg, J. and Joosten, H. (2002): Early 20th century Russian peat scientists as possible vectors for the establishment of *Calluna vulgaris* in Georgian Sphagnum bogs. *Suo* 53, pp. 61-66.
 Klerk, Pim de (in Vorbereitung): Vegetation development of the last ca. 6000 calendar years in and around Ispani 2 (Black Sea coast, Georgia), the world's first discovered percolation bog.
 Krebs, M & Resagk, K. (2001, unpublished): Einfluß der Rinderbeweidung auf das Regen-Durchströmungsmoor Ispani 2 (Georgien), Praktikumsarbeit, 36 p.
 Krebs, M. & Gaudig, G. (2005): Torfmoos (Sphagnum) als nachwachsender Rohstoff - Untersuchungen zur Maximierung der Produktivität von *Sphagnum papillosum* im Regendurchströmungsmoor Ispani 2 (Georgien), *Telma* 35, pp. 171-90, Hannover.
 Krebs, M. & Joosten, J., (2006): The Golden Fleece in trouble - the endangering of the Kolkheti peatlands (Georgia), *International Mire Conservation Group Newsletter* 2006/1, pp. 6-9.
 Krebs, M. (approved 05/2006): Sphagnum farming in Georgia (Black Sea) – a challenge for ecological and economical interests, SER-conference in August 2006 in Greifswald, Abstract book.
 Lamme, O. (2006): An eco-hydrological approach to peatlands: a search of a percolating bog in the Kolchis area. MSc thesis, University Utrecht: 65 p.
 Matchutadze, I. & M. Krebs (2003): News from Georgia - Ispani threatened by road construction, *International Mire Conservation Group Newsletter* 2003/3, p. 36.
 R.Goradze, I. Matchutadze, I. Goradze., (2002), Georgia, *Directory of Azov´ - Black Sea Coastal Wetlands*, Wetlands International. Kyiv.pp.46-75
 Matchutadze I, Skhiladye.m (2003)., *Mires of Kolkheti Lowland*, International conference of Wetlands conservation, Biodiversity and wise use, Armenia, Sevan, p.16
 Maia Akhalkatsi, Richard Lorenz, Izolda Matchutadze and Marina Mosulishvili (2004), *Spiranthes amoena* a new species for flora of Georgia., *Journal Europaischer Orchideen.m* Vol., 36., Heft, pp. 745-755
 Matchutadze I., (2004), *Relict and endemic species of Kolkheti mires'* IMCG General Assembly and scientific symposium, South Africa, Program with abstract
 Matchutadze I., Krebs M., (2005) *Endangering of Kolkheti mires* IMCG General assembly and congress Tierra del Fuego Argentina., Program with abstract
 Matchutadze I., 2004., *Mires of Kolkheti* 40 p.

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

<1 file(s) uploaded>

vi. other published literature

<1 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Kobulate managed reserve (Agency of Protected Areas, 17-08-2012)



Kobulate managed reserve (Agency of Protected Areas, 24-08-2012)



Kobulate managed reserve (Agency of Protected Areas, 17-08-2012)



Kobulate managed reserve (Agency of Protected Areas, 17-08-2012)



Kobulate managed reserve (Agency of Protected Areas, 17-08-2012)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1997-02-07