

WORLD HERITAGE NOMINATION

IUCN TECHNICAL REVIEW

1. IDENTIFICATION NUMBER AND NAME 219 SREBARNA NATURE AND BIOSPHERE RESERVE
2. LOCATION: Situated 16 km west of the town of Silistia and 1 km south of the Danube, in the County of Silistra, village of Srebarna
3. NOMINATED BY: Research and Coordination Centre for Preservation and Restoration of the Environment
4. DOCUMENTATION:
 - (i) Nomination form
 - (ii) Supplementary documentation (IUCN)
 - a) Consultations: Dr. S. Nedialkov; Dr. Z. Kostova; Brian Groombridge.
 - b) Committee on Environmental Protection. 1981. Protected Natural Sites in the People's Republic of Bulgaria. Sofia Press, Sofia.
 - c) Institute of Cartography. 1979. Bulgaria Protected Natural Sites. (Map).
5. BACKGROUND AND SUMMARY

Srebarna is a fresh-water lake adjacent to the Danube, covering an area of 600 ha. It provides nesting grounds to 99 species of birds and seasonal habitat to an additional 80 species of migratory birds; Srebarna is protected by international legislation, under the Convention on Wetlands of International Importance (Ramsar Convention). The lake is surrounded by hills which provide a natural boundary and provide an ideal means for observing the waterfowl (see attached data sheet for additional details).

6. INTEGRITY

The boundaries are clear and explicit; the area is strictly protected (with only carefully-controlled scientific research allowed). The site has been established as a biosphere reserve and a Ramsar site. The site is relatively small, so the quantities of breeding pairs are low and probably insufficient in themselves to maintain any of the species; only if other areas are also protected can the species be expected to survive. The site is the largest lake left after drainage of the marshy zone along the Danube and was connected to the river until a dyke was built in 1949; its current situation is therefore not completely natural and is maintained by water management measures (primarily drainage by canal). A buffer zone is being developed around the reserve.

7. COMPARISON WITH OTHER AREAS

The site is clearly important on a European scale, for both breeding and migratory waterfowl. While its small size means that the quantities of birds are not comparable to other, larger wetlands, it does have outstanding diversity, containing half the Bulgarian bird fauna. With the degradation of the Danube's waterfowl due to human causes, Srebarna becomes an extremely important wetland habitat.

8. EVALUATION

Srebarna, with its important breeding populations of a number of threatened species of birds and as an important wetland on the Western Palaearctic migratory bird flyway, qualifies for the World Heritage list under criteria iv.

9. RECOMMENDATION

Srebarna Nature Reserve should be inscribed on the World Heritage List. The Bulgarian authorities should be warmly encouraged for their efforts to create a buffer zone around the property, and the proposal to link Srebarna with other reserves on the Romanian side of the Danube should be commended as a very useful means of enhancing the ecological integrity of the property.

International Union for Conservation of
Nature and Natural Resources

15 April 1983 (revised 8 July 1983)

NAME Srebarna Nature Reserve

MANAGEMENT CATEGORY I & IX (Strict Nature Reserve & Biosphere Reserve)

Nominated as a World Heritage Site (Criteria: iv)

GEOGRAPHICAL PROVINCE 2.11.5 (Middle European Forest)

LEGAL PROTECTION Strict reserve - all economic and tourist activities are prohibited. Established as a Nature Reserve by the Ministry of Agriculture and Foods, 20 September 1948, Decree No. 2-11-931.

DATE ESTABLISHED Declared as a wildfowl refuge in 1942, and altered to a nature reserve in 1948. Acknowledged as a Biosphere Reserve in January 1977.

GEOGRAPHICAL LOCATION The reserve comprises Srebarna Lake, located 19km from the town of Silistra in Silistra province, and 1km south of the Danube (which forms the border with Romania). 44°05'N, 27°07'E.

ALTITUDE No information

AREA 600ha

LAND TENURE State property

PHYSICAL FEATURES Srebarna is a typical freshwater Danubian lake on the flood terrace of the river, formed after the drainage of the marshy zone along the Danube. The marshes are overlooked by a number of hills, which lie just outside the reserve boundaries.

VEGETATION Srebarna is the only natural tract of land of any considerable extent to be protected in north-eastern Bulgaria, a floristic region of the Ukraine-Kazakh biotic province. Plants include the reed community Phragmites communis which occupies two thirds of the reserve, water lily Nymphaea alba and a number of rare marsh plants.

NOTEWORTHY FAUNA Very rich avifauna - nearly 180 bird species (half of the Bulgarian avifauna), including 80 migratory species. 99 breeding species, including the only Bulgarian colony of Dalmatian pelican Pelecanus crispus (V) (50-100 pairs), white-tailed eagle Haliaeetus albicilla (V) (1 pair), glossy ibis Plegadis falcinellus (50-5000 pairs), white spoonbill Platalea leucorodia (3-10 pairs) and little cormorant Phalacrocorax pygmaeus (20 pairs). The reserve is the only nesting place in Bulgaria for the great egret Egretta alba (10-15 pairs), and there are five other species of heron with some 1000 nests. Others species include mute swan Cygnus olor, a variety of geese Anser anser, A. erythropus, and Branta ruficollis, and ducks Anas strepers, Aythya nyroca, Tadorna ferruginea, and Netta rufina; red necked grebe Podiceps griseigena; two of the three European species of marsh tern Chilidonias nigra, and C. hybrida; bluethroat Luscinia svecica; and bearded reedling Panurus biarmicus. The surrounding hills offer a unique opportunity for ornithologists to study the birds without disturbing them. Otter Lutra lutra (V) is occasionally found in the reserve.

ZONING A buffer zone is being developed around the reserve.

CONSERVATION MANAGEMENT A dam built in 1949 prevented regular inundation of the lake by the Danube, resulting in the lake becoming shallower and turning into a marsh. A project was implemented in 1978 which suppressed part of the dam and restored communication with the river. A project has been discussed regarding the establishment of a joint nature reserve with Romania, incorporating both banks and the islands of the Danube.

DISTURBANCES OR DEFICIENCIES The site is relatively small so the quantities of breeding pairs of birds are low and probably insufficient to maintain any of the species. Muskrats Ondatra zibethica, from central Europe, which are also to be found along the Bulgarian reaches of the Danube, became naturalised in the lake area in 1956. The reserve is well fenced and surrounded by forests, vineyards, arable lands and stretches of steppe (which will be assigned to the reserve). Economic activities around the reserve do not disturb the wildlife within it.

SCIENTIFIC RESEARCH Only carefully controlled scientific research allowed. There is continuous research, mainly to establish the numbers of the different species and the ecological conditions necessary for their long-term preservation.

SPECIAL SCIENTIFIC FACILITIES A natural history museum and field ecological station.

PRINCIPAL REFERENCE MATERIAL

Bulgurkov, K. (1958). Particularités hydrologiques de la réserve - le lac Srébarna et la composition de sa faune piscicole. Izvestija na Zoologischeskija institut s musej pri BAN. Bulgarian Academy of Sciences, vol. VII.

Hodek, R. (1982). Der Wanderer Heim. Mitt. Orn. Ver, Wien. 6.

Micev, T. (1958). La réserve Srébarna. Nachi rezervati i prirodni zabeležitelnosti, vol. I.

Paspaleva-Antonova, M. (1961). Contribution à l'ornithofaune de la réserve Srébarna, région de Silistra. Izvestija na Zoologischeskija institut s musej pri BAN, vol. XV.

STAFF Two guards and the museum staff of 2 biologists and technical personnel.

BUDGET No information

LOCAL PARK OR RESERVE ADMINISTRATION Committee for the Environmental Protection at the Council of Ministers of P.R. of Bulgaria (Administrative); Research and Coordination Centre for the Protection and Restoration of the Environment, B.A.S. (Scientific).

DATE 1982

BULGARIA-Reserve Srebarna

BULGARIA

NAME Reserve Srebarna

MANAGEMENT CATEGORY I (Strict Nature Reserve)
IX (Biosphere Reserve)
X (World Heritage Site - Criteria: iv)

BIOGEOGRAPHICAL PROVINCE 2.11.05 (Middle European Forest)

GEOGRAPHICAL LOCATION Srebarna Lake is located on the Danube flood plain, 19km west of the town of Silistra in Silistra province, 1km south of the Danube (which forms the border with Romania). 44°05'N, 27°07'E

DATE AND HISTORY OF ESTABLISHMENT The area was declared a wildfowl refuge in 1942 and established as a nature reserve by the Ministry of Agriculture and Foods on 20 September 1948, Decree No. 2-11-931. It was accepted as a World Heritage site on 7 March 1974, as a Ramsar site on 24 September 1975 and as a biosphere reserve in January 1977.

AREA 600ha

LAND TENURE State government

ALTITUDE Approximately 100m

PHYSICAL FEATURES This freshwater lake is situated on the flood plain of the River Danube, to which it was connected until 1949. The disconnection prevented annual flooding and the level of lake fell one metre per year. However, the lake was reconnected by canal in 1978. The land in the immediate surroundings is marshy, but just beyond the boundaries are low hills.

CLIMATE No information

VEGETATION Srebarna is the only natural tract of land of any considerable extent to be protected in north-eastern Bulgaria, a floristic region of the Ukraine-Kazakh biotic province. Plants include the reed community Phragmites communis which occupies two thirds of the reserve and forms a thick barrier around the lake, water lily Nymphaea alba and a number of rare marsh plants.

FAUNA The reserve was set up primarily to protect the rich avifauna, nearly 180 bird species (half of the Bulgarian avifauna), including 80 migratory species. There are 99 breeding species, including the only Bulgarian colony of Dalmatian pelican Pelecanus crispus (V) (50-100 pairs), white-tailed eagle Haliaeetus albicilla (V) (one pair), glossy ibis Plegadis falcinellus (50-500 pairs), white spoonbill Platalea leucorodia (three-ten pairs) and little cormorant Phalacrocorax pygmaeus (20 pairs). The reserve is the only nesting place in Bulgaria for great egret Egretta

Infobase produced by WCMC, January 1992

alba (10-15 pairs), and there are five other species of heron with some 1,000 nests. Other species include mute swan Cygnus olor, a variety of geese Anser anser, and ducks Anas strepera, Aythya nyroca, Tadorna ferruginea, and Netta rufina; red-necked grebe Podiceps griseigena; two of the three European species of marsh tern Chilidonias nigra, and C. hybrida; and bearded tit Panurus biarmicus. Otter Lutra lutra (V) is occasionally found in the reserve. White-fronted goose Anser albifrons, red-breasted goose Branta ruficollis, and bluethroat Luscinia svecica have become established as wintering species.

CULTURAL HERITAGE The main impact from man was through drainage schemes, but this has now been largely reversed.

LOCAL HUMAN POPULATION A village with 3,000 inhabitants is located on the west coast.

VISITORS AND VISITOR FACILITIES Include a nature museum and guide.

SCIENTIFIC RESEARCH AND FACILITIES Only carefully controlled scientific research is allowed. There is continuous research, mainly to establish the numbers of the different species and the ecological conditions necessary for their long-term preservation. There is an ecological field station at Srebarna Village.

CONSERVATION MANAGEMENT A project was initiated in 1978 to reconnect the lake with the Danube to prevent water levels becoming too low and to restore the lake's fish population. Access is strictly controlled to scientific staff with permits and shooting prohibited. The reserve is well fenced. A management decree was issued in 1962. There has been discussion about establishing a joint nature reserve with Romania, including both banks and the islands of the Danube. There is a buffer zone of 575ha.

MANAGEMENT PROBLEMS Problems include the rapid and abnormal development of succession processes due to annual sedimentation of large reed-mace vegetation in the reserve, as well as the insufficient water influence of the Danube. As a result, the reed-mace islands are extended and increased in thickness so that wild boars, foxes and jackals now pose a threat to both individual birds nests and colonies. A decrease in the number of nesting pairs of pelican, glossy ibis, white spoonbill etc has been recorded and a 100-year old Dalmatian pelican colony is under threat. Proposals to lift the threat include constructing fencing around colonies and the reserve and increasing the water level and thus the lake depth.

STAFF There are four officers in the Ecological Field Station and five staff, including a biologist, control and reserve management personnel in the nature museum.

BUDGET No information

LOCAL ADMINISTRATION

Nature Museum, 7500 Silistra

Institute of Ecology, Ecological Field Station, Gagarin St. 2, 1113 Sofia

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REFERENCES

- Bulgurkov, K. (1958). Hidrologichni osobenosti na rezervata - ezeroto Srebarna (Hydrological Features of the Reserve - Srebarna Lake). In: Izvestia na Zoologischeski Institut s Muzei pri BAN. Bulgarian Academy of Sciences, vol. VII.
- Grimmet, R.F.A. and Jones, T.A. (1989). Important bird areas in Europe. ICBP Technical Publication No. 9. International Council for Bird Preservation, Cambridge, UK. Pp. 78
- Hodek, R. (1982). Der Wanderer Heim. Mitt. Orn. Ver, Wien. 6.
- IUCN (1987). Directory of Wetlands of International Importance. IUCN Conservation Monitoring Centre. IUCN, Gland, Switzerland and UK, Cambridge. Pp 46-47.
- Michev, T. (1958). Reservat Srebarna. In: Nashi rezervati i prirodni zabelezhitelnosti. Nauka i Izkoustvo, Sofia. Vol.I.
- Paspaleva-Antonova, M. (1961). Prinos kam ornitofaunata na rezervata Srebarna, okrag Silistra. In: Izvestija na Zoologischeskia Institut s Muzei pri BAN. Vol. XV.
- Stoilov, D., Noshtev, V., Gerasimov, S. and VeleV, V. (1981). Protected Natural Sites in the People's Republic of Bulgaria. Balkan State Printing House: Sofia.

DATE 1982, revised July 1986 and May 1990
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WORLD HERITAGE NOMINATION – IUCN TECHNICAL EVALUATION

SREBARNA NATURE RESERVE (BULGARIA) – ID No. 219

IUCN carried out a desk review of the proposed creation of a buffer zone for the Srebarna Nature Reserve, Bulgaria, taking into consideration comments from three external reviewers.

1. BACKGROUND INFORMATION

Srebarna Nature Reserve was inscribed on the World Heritage List with an area of 600 ha in 1983 on the basis of criterion (x). No buffer zone was identified at that time. In response to the Retrospective Inventory and the Periodic Reporting follow up, the World Heritage Centre received on 26 October 2007 a proposal from the State Party for creation of a buffer zone, which was transmitted to IUCN on 2 November 2007 for review.

With its proposal the State Party submitted a sufficiently scaled topographic map clearly showing the boundaries of the World Heritage property and the proposed buffer zone. The State Party notes that, following more precise measurements, the area of the World Heritage property is now considered to be 638 ha rather than 600 ha. The State Party further notes that the protected area category of the World Heritage property was changed from “nature reserve” to “managed reserve” under the Bulgarian Protected Areas Act of 1998.

2. SHORT SUMMARY OF PROPOSAL

The State Party proposes to create a 673 ha buffer zone for the 638 ha World Heritage property. The buffer zone for the World Heritage property would consist of two components:

1) The portion of the Srebarna Nature Reserve (254 ha) that is protected according to Bulgarian legislation but is not part of the World Heritage property as it consists of areas that do not meet the requirements of the World Heritage Convention. These areas include agricultural lands and poplar plantations as well as the Danube river banks, the water area between the river banks and Devnja island, and natural forests on the island.

2) The buffer zone (419 ha) surrounding the Srebarna Nature Reserve, as protected according to Bulgarian legislation, which was determined by Order No. 1 of 3 January 1983 of the Environment Preservation Committee (the institution in charge of protected areas at that time). The aim of this buffer zone is to

prevent and reduce negative human impacts on the reserve. The buffer zone is subject to prohibitions relating to the introduction of non-local plant or animal species, pollution from domestic, industrial or other types of waste, hunting during bird nesting and breeding periods, burning of reeds without approval of the Ministry of Environment and Waters, and other activities that could disturb the nesting and breeding bird colonies.

3. IMPLICATIONS FOR OUTSTANDING UNIVERSAL VALUE AND INTEGRITY

The proposed creation of a buffer zone for the World Heritage property will help to protect the Outstanding Universal Value and integrity of the property by preventing and reducing negative human impacts. The proposed buffer zone is as large as the property itself and entirely encircles the property with the exception of short sections in the southwest (around the village of Srebarna) and southeast of the property. The size and shape of the buffer zone therefore appear to be adequate.

In conclusion, IUCN considers that the proposed creation of a buffer zone should be approved.

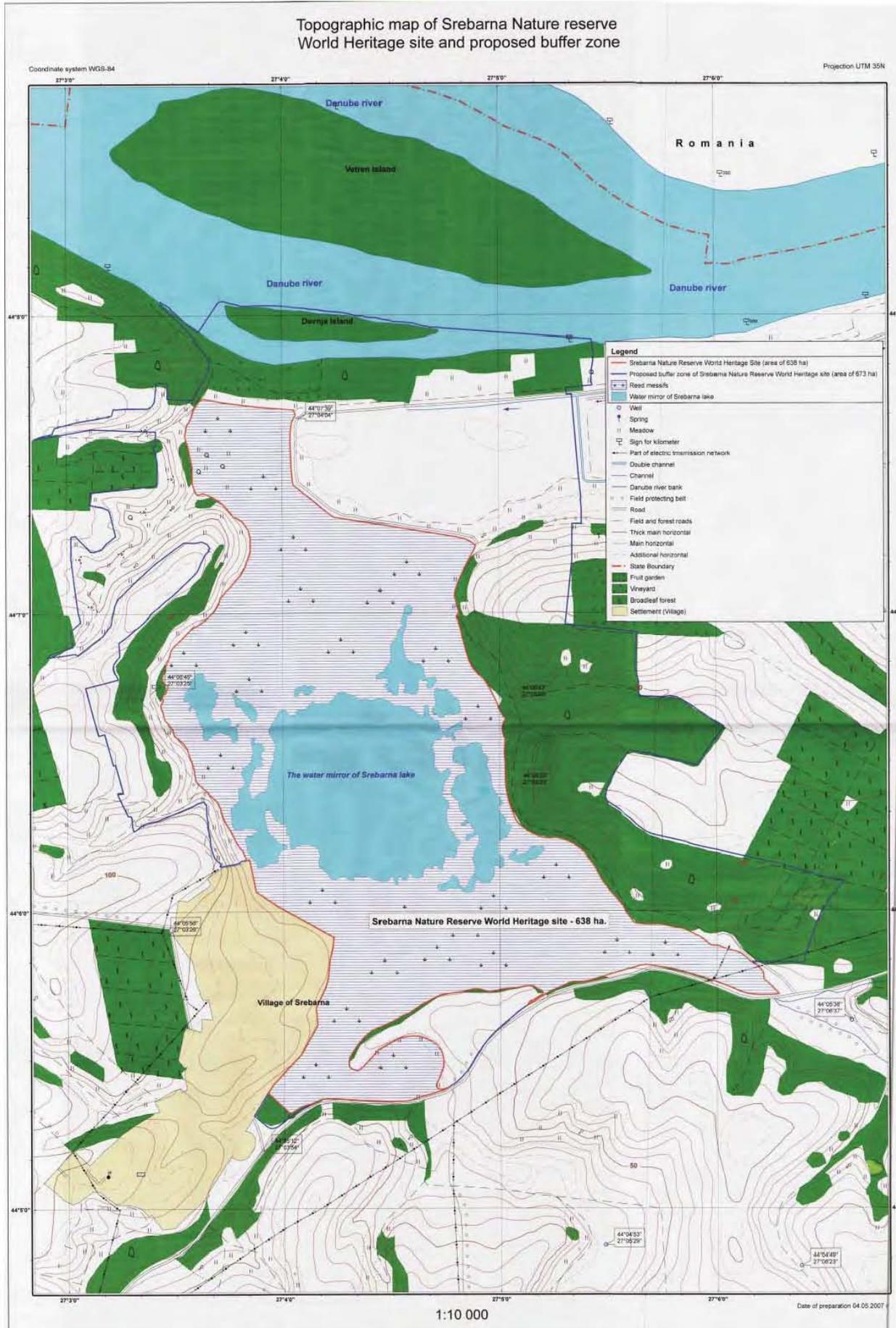
4. RECOMMENDATIONS

IUCN recommends that the World Heritage Committee adopt the following decision:

The World Heritage Committee,

1. Having examined Documents WHC-08/32.COM/8B and WHC-08/32.COM/INF.8B2,
2. Approves the proposed creation of a 673 ha buffer zone for the 638 ha Srebarna Nature Reserve, Bulgaria, in order to strengthen the integrity of the World Heritage property.

Map 1: Boundaries of the property and proposed buffer zone



CANDIDATURE AU PATRIMOINE MONDIAL – ÉVALUATION TECHNIQUE DE L’UICN

RÉSERVE NATURELLE DE SREBARNA (BULGARIE) – ID No. 219

L’UICN a réalisé une étude théorique de cette proposition de création d’une zone tampon pour la Réserve naturelle de Srebarna, Bulgarie, en tenant compte des commentaires de trois évaluateurs indépendants.

1. CONTEXTE

La Réserve naturelle de Srebarna a été inscrite sur la Liste du patrimoine mondial en 1983, sur la base du critère (x), avec une superficie de 600 ha. Aucune zone tampon n’était définie à l’époque. En réponse au suivi de l’Inventaire rétrospectif et du Rapport périodique, le Centre du patrimoine mondial a reçu, le 26 octobre 2007, une proposition de l’État partie en vue de la création d’une zone tampon qui a été transmise à l’UICN le 2 novembre 2007 pour évaluation.

Avec cette proposition, l’État partie a soumis une carte topographique à échelle suffisante pour montrer clairement les limites du bien du patrimoine mondial et la zone tampon proposée. L’État partie note, qu’à la suite de mesures plus précises du bien du patrimoine mondial, on considère désormais que sa superficie n’est plus de 600 ha mais de 638 ha. L’État partie ajoute que le bien du patrimoine mondial a été changé de catégorie d’aire protégée pour passer de « réserve naturelle » à « réserve gérée » en vertu de la Loi bulgare de 1998 sur les aires protégées.

2. BREF RÉSUMÉ DE LA PROPOSITION

L’État partie propose de créer une zone tampon de 673 ha pour le bien du patrimoine mondial dont la superficie couvre 638 ha. La zone tampon du bien du patrimoine mondial comprendrait deux éléments :

1) Le secteur de la Réserve naturelle de Srebarna (254 ha) qui est protégé au titre de la législation bulgare mais qui ne fait pas partie du bien du patrimoine mondial car il englobe des zones qui ne remplissent pas les conditions de la Convention du patrimoine mondial. Ces zones comprennent des terres agricoles et des plantations de peupliers ainsi que les rives du Danube, la zone aquatique qui sépare les rives du fleuve et l’île de Devnja et les forêts naturelles qui se trouvent sur l’île.

2) La zone tampon (419 ha) qui entoure la Réserve naturelle de Srebarna, protégée au sens de la législation bulgare et définie par le décret n° 1 du 3 janvier 1983 du Comité de protection de l’environnement (l’institution en charge des aires protégées à l’époque). Le but de cette zone tampon

est d’empêcher et de réduire les impacts négatifs des activités anthropiques sur la réserve. La zone tampon est sujette à différentes interdictions portant sur l’introduction de plantes ou d’espèces animales non locales, la pollution provenant de déchets domestiques, industriels et d’autres origines, la chasse en période de nidification et de reproduction des oiseaux, le brûlage des roseaux sans autorisation du ministère de l’Environnement et de l’Eau et d’autres activités qui pourraient perturber les colonies d’oiseaux nicheurs et reproducteurs.

3. INCIDENCES POUR LA VALEUR UNIVERSELLE EXCEPTIONNELLE ET L’INTÉGRITÉ

La création proposée d’une zone tampon pour le bien du patrimoine mondial contribuera à protéger la valeur universelle exceptionnelle et l’intégrité du bien en empêchant et en atténuant les impacts anthropiques négatifs. La zone tampon proposée est aussi grande que le bien lui-même et entoure totalement le bien à l’exception de petites sections dans le sud-ouest (autour du village de Srebarna) et dans le sud-est du bien. La taille et la forme de la zone tampon semblent donc être adéquates.

En résumé, l’UICN considère que la création proposée d’une zone tampon doit être approuvée.

4. RECOMMANDATIONS

L’UICN recommande que le Comité du patrimoine mondial adopte la décision suivante :

Le Comité du patrimoine mondial,

1. Ayant examiné les documents WHC-08/32.COM/8B et WHC-08/32.COM/INF.8B2,
2. Approuve la création proposée d’une zone tampon de 673 ha pour la Réserve naturelle de Srebarna, Bulgarie, d’une superficie de 638 ha, afin de renforcer l’intégrité du bien du patrimoine mondial.

Carte 1: Limites du bien et zone tampon proposée

