The Convention on Wetlands
(Ramsar, Iran, 1971)

Montreux Record - Questionnaire

(as adopted by the Conference of the Contracting Parties in Resolution VI.1)

Section One
Information for assessing possible inclusion of a listed site in the Montreux Record

Essential items

- Name of site

"Warta River Mouth" National Park, former "Słońsk" Nature Reserve (Park Narodowy "Ujście Warty").

Ramsar Criteria for listing the site as internationally important **(1, 2, 4, 5, 6, 8).**

1. Site contains a representative example of a semi-natural wetland in the broad floodplain of medium-size lowland river.

2. The site is important for it supports 64 bird species vulnerable and endangered at European scale, listed in Annex I of the Birds Directive. The most significant and most rare species, in addition to the globally endangered aquatic warbler *Acrocephalus paludicola*, include such birds as spotted crake *Porzana porzana*, shoveler *Anas clypeata*, corncrake *Crex crex*, little gull *Larus minutus,* little tern *Sterna albifrons*, common tern *S. hirundo*, whiskered tern *Chlidonias hybrida*, shelduck *Tadorna tadorna* and night heron *Nycticorax nycticorax*.

In addition, 15 birds species found at the site are listed by the Polish Red Data Book of Animals. The Park area is important for supporting vulnerable habitats threatened with extinction at European scale, such as Natura 2000 sites of the Habitat Directive: (3270) muddy river banks with *Chenopodion rubri* p.p. and *Bidention* p.p.; (3150) natural eutrophic lakes with *Hydrocharition* Allliance – type vegetation; (2330) inland dunes with open *Corynephorus* and *Agrostis* grasslands vegetation.

The Park is also important for survival of critically endangered plant species as for e.g. *Thesium ebracteatum*, listed by the Annex II to Habitat Directive.

4. The National Park "Warta River Mouth" is very important since it provides safe shelter for large numbers of avifauna at critical life stages of moulting and flight-feather exchange, especially for populations of ducks (shoveler *Anas clypeata*, teal *A. crecca*, wigeon *A. penelope*, mallard *A. platyrhynchos*), coot *Fulica atra*, crane *Grus grus,*greylag goose *Anser anser* and mute swan *Cygnus olor*. The site also supports these and many other waterfowl during winter.

The site is of significance in view of Criterion 4 as it constitutes one of nationally most important resting places for migrating avifauna gathering in flocks of many thousands. The most numerous populations have: bean goose *Anser fabalis*, white-fronted goose *A. albifrons*, greylag goose *A. anser*, wigeon *Anas penelope*, mallard A. *platyrhynchos*, teal *A. crecca*, shoveler *A. clypeata*, pochard *Aythya ferina*, tufted duck *A. fuligula*, coot *Fulica atra*, crane *Grus grus* and ruff *Philomachus pugnax*.

The wetland is regarded as internationally significant since it provides one of the best wintering sites for white-tailed eagle *Haliaeetus albicilla* and whooper swan *Cygnus cygnus* in Europe.

Vast spring flooding in the wetland provide one of the most important spawning sites for fishes in Western Poland.

5. Waterfowl concentrations in the Park exceed 200 000 individuals. During spring and autumn migrations gather there such species e.g. bean goose *Anser fabalis* – about 100 thousands, white-fronted goose *Anser albifrons* – about 60 thousands, mallard *Anas platyrhynchos* up to 40 thousands individuals and coot *Fulica atra* – up 20 thousands individuals. Altogether the site may host above 250 000 of birds at a time.

6. In winter the site supports a considerable percent of the Baltic population of white-tailed eagle *Haliaeetus albicilla* (ca 2Active Protection of Rare Species of Waterfowl Active Protection of Rare Species of Waterfowl %) i.e. up to 50 individuals and at least above 10% of the migrating populations of bean goose *Anser fabalis* and coot *Fulica atra*. During spring and autumn migrations there gather there such species e.g. bean goose *Anser fabalis* – about 20% of the population on migration tract, white-fronted goose *Anser albifrons* - 6% of the migrating population, mallard *Anas platyrhynchos*, coot *Fulica atra* and whooper swan *Cygnus cygnus* – more than 3% of the migrating population, and mute swan *Cygnus olor* – more than 4% of the migrating population. It has also one of most important breeding site in Poland for gadwall *Anas strepera*, garganey *A.querquedula*, mallard *A. platyrhynchos*, greylag goose *Anser anser* (380-540) and coot *Fulica atra* (up to 6000 pairs).

8. In spring when the water level in Warta and Postomia rivers is usually the highest, vast tracts of high water provide good routes for many migrating fishes including *Salmo salar* and *Salmo trutta* m. *trutta*. These rivers constitute migrating corridors for the two above species whose spawning nests have been observed every year since the reintroduction of *Salmo trutta* m. *trutta* into Drawa River in 1985.

- Nature of the change in ecological character/potential for adverse change

The main changes in the ecological integrity of the wetland result from shallowing of oxbows and canals in the Warta valley, which is brought about by the succession of communities *Nupharo – Nymphaeetum albae* and from the secondary succession over the larger part of the site - spreading of willow shrubs, e.g. encroachment of shrubs on *Molinia* type meadows near Olszynki site.

The Park is at potential risk of temporary water deficit in the Warta river catchment. The amount of water incoming during early spring may be sometimes too low to safeguard the needs for maintenance of its ecological character. A shortened period of water spills over the wetland may result in considerable changes in hydrological conditions for migrating and spawning fishes. The water level in the Park depends also on general climatic factors so that prolong droughts and precipitation deficits which were a common phenomenon over the last several years might have been contributing to the local shallowing of aquatic bodies.

Lower water level may facilitate the activity of predators in the area (red fox *Vulpes vupes,* American mink *Mustela vison* and raccoon *Procyon lotor*) what affects the breeding chances of many birds or otherwise disturb their life cycles.

- Reason(s) for adverse change, or potential adverse change, in ecological character

The causes for changes in ecological integrity of the Park result from both human made and natural causes. One of the latter is the steady decrease of water available as precipitation and a decreased water availability in general. A unique character of the Park may only be maintained on condition that favourable hydrological conditions persist. The status of water resources at the site depends

upon several conditions out of which the most important are: 1) water level on Odra river, 2) water level on Warta river, 3) meteorological factors, 4) purity of water.

Water levels on Odra river (in general twice as high as on Warta river) are the main factor responsible for the level of flooding at the site. Thus the main but not the only condition for the occurrence of spring flooding is a high water level at Odra basin upstream of the Warta mouth. In turn, water levels on Warta play an important role in determining the inundation level in the reservoir of the Park. They depend partly on the levels at the Jeziorsko retention reservoir located on Warta upstream of the site. In general, the functioning of Jeziorsko reservoir causes a drop in the water level of the Park during early spring flooding (February-March). That is the time of waterfowl migration therefore the water level might affect their decision to undertake nesting. It is possible to synchronise the water release from Jeziorsko in early spring to enable a fuller replenishment of water reservoirs in the National Park of Warta River Mouth and prolong the water stagnation time. However, over the last several years the Park has not suffered from the early spring water deficits. The secondary succession and overgrowing of meadows constitute recently a much lower threat since the Park Management undertakes intensive efforts to reinstate cattle grazing and traditional meadow management in the area.

A negative impact on the Park nature results from disturbances to birds caused by photographers and nature watchers.

Another factor affecting birds may be hunting outside the Park.

Additional items which may be included

- Date Information Sheet on Ramsar Wetlands submitted

The initial Data Information Sheet was submitted in 1984, updated in 2007.

- Date and source of Information Sheet updates (e.g. National Reports, national wetland inventory, specific survey)

    - Siodło P.O., Błaszkowska B., Chylarecki P. 2004. Ostoje ptaków o znaczeniu europejskim w Polsce. OTOP Warszawa (Bird Areas of European Importance in Poland).
    - Gromadzki M. (red.) 2004. Ptaki. Poradnik ochrony siedlisk i gatunków Natura 2000 - podręcznik metodyczny. Ministerstwo Środowiska, Warszawa. Tom 7 (część I), Tom 8 (część II) (Birds – Manual of species and habitat protection).
    - Wójcik B. 2002. Sieć ostoi ptaków w Polsce. Wdrażanie Dyrektywy Unii Europejskiej o Ochronie Dzikich Ptaków. OTOP, Gdańsk.
    - Bartoszewicz M., Wypychowski K. 2002. Dane niepubl. – PN Ujście Warty. National Park “Warta River Mouth”.
    - Plan Ochrony Rezerwatu Przyrody “Słońsk”. Jacek Engel, Bogdan Jackowiak, Lechosław Kuczyński, Tomasz S. Osiejuk. Poznań - Słońsk 1998 (Management Plan of the Słońsk Reserve- Water Management Plan).
    - Konrad Wypychowski, Magdalena Bartoszewicz, Paweł Kaczorowski the Staff of the “Ujście Warty”
    - National Park - personal information 2007.
    - Jacek Engel – Personal information 2007.

- Benefits and values derived from the site

The Park area is used for tourism (natural tourism, angling) for non-intensive agricultural purposes (cattle grazing, haymaking).

- Extent to which values and benefits derived from the site have decreased or changed

There is no information on how the changes in the wetland have contributed to the changes in the size of benefits decreased.

- Monitoring programme in place at the site, if any (technique(s), objectives, and nature of data and information gathered)

The Park Management conducts monitoring of birds, ichtiofauna, beavers, game species (roe deer, red deer, wild boar), vegetation and the monitoring of predators (mammals).

- Assessment procedures in place, if any (how is the information obtained from the monitoring programme used)

The results obtained in the course of ornithological and botanical monitoring are used to support the planning of tasks of active nature conservation. Changes in numbers of breeding and non-breeding birds as well as in the location of breeding sites determine the way of agricultural management of the area in that the time of grazing, mowing and opening for tourists depends upon the information received from the above monitoring. Correlating the results of monitoring of the bird breeding success with those of the American mink numbers provided for the introduction of control of mink numbers within the Park.

- Ameliorative and restoration measures in place or planned (if any) so far

The former "Słońsk Reserve" has been enlarged and designated as national park. The main ameliorative measures proposed and currently introduced by the Management Plan include:

- a two-stage action is planned to ameliorate the hydrological conditions of the Park including:
  - i) regeneration and reinstating of the original system for irrigating the site called Royal Island (about 400 ha) in order to restore favourable aquatic conditions in the beginning of summer for moulting ducks, geese and mute swans in flocks of thousands,
  - ii) restoration of irrigating network within the portion called Northern Polder Protective Range and the adjacent area with the aim to improve water conditions on meadow and pasture sites in order to provide larger breeding space and increase the number of breeding waterfowl. At the same time, it will provide conditions for a better extensive agricultural land use and constitutes an alleviation of flooding episodes since there is a possibility of inundating the whole Polder:
- coordination of timing of water storage/ release from the Jeziorsko Reservoir with the Regional Water Management Division in Poznań;
- introducing a duty for all farmers using land within the Park to agree contracts for agricultural activity with preference of long-term agreements; at present about 6000 ha of land within the Park are under lease schemes subject of the agri-environmental programme;
- imposing the rules for wetland use taking into account restrictions in use and access limits as well as principles including the prohibition of staying in the Park overnight, prohibition of using other roads than authorized, angling is entirely under control of the Park Management, it is allowed only from the shores of Postomia and Kanał Czerwony

(Red Canal) in specified periods and the observance must be maintained of not using live fish as bait and of not catching pike (*Esox lucius*) in December, regulations concerning shorter fishing periods and larger protective sizes were imposed as well as ban on the night catch, ban on camping, kindling fires, littering, emitting noise; these activities are strictly regulated by the Park Management, ban on using engine boats; no engine boats nor any other swimming equipment (kayaks, canoes, etc.) are allowed in the Park except for the Warta river route which is a country scale water route, establishing methods and organization of integrated monitoring of the wetland, information of wider public on the existing and potential threats to the Park nature.

- List of attachments provided by the Contracting Party (if applicable)

- List of attachments provided by the Ramsar Bureau (if applicable)

Section Two

Information for assessing possible removal of a listed site from the Montreux Record

- Success of ameliorative, restoration or maintenance measures (describe if different from those covered in Section One of this questionnaire).

Of the major significance for the Park as the Ramsar Site is its considerable extension in recent years and the upgrade in designation as a National Park. This gives the Ramsar Site a completely new status and has already provided opportunity for undertaking measures to significantly ameliorate its conditions.

The Park Management in cooperation with the Polish and International Birds Societies is constantly monitoring the situation concerning the impact of water level changes on the number of birds and survival of their populations. The Park has initiated several important programmes of ameliorative significance, including: Active Protection of Rare Species of Waterfowl and Restoration of Sites of Rare Waterfowl Species in the Park Through Removal and/or Limiting the Encroachment of Willow Shrubs.

The results of water level monitoring provide evidence that over the last several years the Park has not suffered from the early spring water deficits. At the same time, the secondary succession and overgrowing of meadows constitute recently a much lower, if not a virtually non-existent, threat since the Park Management undertakes intensive efforts to reinstate cattle grazing and traditional meadow management in the area. Already the local farmers have agreements to lease about 6000 ha of meadows and pastures under 10 year long schemes. That constitutes a considerable improvement and is an unquestionable success of the Park Management, since the agri-environmental schemes provide opportunity for managing meadows and pastures for the benefit of birds, and especially for safeguarding their breeding areas. The implementation of the agri-environmental schemes within the Programme of Active Protection of Rare Species of Waterfowl provides an important tool for the Park Service, to control the activity of farmers through e.g. introducing temporary prohibition of cattle grazing within a definite area. The removal of willow shrubs has been implemented in 2007 and the first phase of the work has been done over the year 2007.

- Proposed monitoring and assessment procedures (describe if different from those in Section One of this questionnaire)

The measures for monitoring are proposed above in the preceding paragraphs.

- Extent to which the ecological character, benefits and values of the site have been restored or maintained (provide details)

Among the measures undertaken to reinstate the former character of the site the most important are the agri-environmental schemes which now embrace the area of 6000 ha in the Park. The contracts provide for cattle grazing and hay making by local farmers what to a great degree improves the character of the site by creating feeding and breeding sites, especially for geese on the area of about 80% of the Ramsar Site as is described above. The restoration of original sites for breeding waterfowl has been started on about one fifth of the Park area – this includes both the removal willow shrubs and reinstatement of drainage systems in the Royal Island and the Northern Polder areas.

The Park management has enforced a strong control over angling activity within the Park and imposed a strict ban of illegal touristic use of land (ban on using other than designated spaces).

At the same time an intensive monitoring of predators over the whole Park area is carried out in the Park what enables their effective elimination.

- Rationale for removing the site from the Montreux Record (refer to Guidelines for operation of the Montreux Record, together with Section One of this questionnaire)

In view of the extension of the Ramsar Site and upgrading its conservation status with the designation of a National Park, the present possibilities of the Park Management has been increased and enable to effectively counteract succession and restore the open character of communities within the site. This is evidenced by the size of Park area subject to traditional management and the dimension of the new Programmes ameliorating bird breeding conditions conducted. Thus, the secondary succession and overgrowing of meadows do not constitute a threat any longer since cattle grazing and traditional meadow management are already in place over 6000 ha of meadows and pastures. Since the schemes are 10 year long and probably will be extended there is a durable tendency for maintaining the integrity of ecological character of the site. Such a considerable improvement is an unquestionable success of the Park Management.

Following a more detailed study on local temporary water deficits, the main reason for including the site into the Montreux Procedure, it can now be suggested that the above deficits over the last several years do not exacerbate the situation any longer. To the contrary, they are to a great extent conditioned by the overall hydro-meteorological situation, albeit the influence of the Jeziorsko reservoir functioning and its part is not to be entirely excluded. Since the overall situation is of the character of God's act outside of the control of the Park Management, and account taken of the significant improvement of the status of the site - it is proposed to consider the possibility of withdrawing the site from the Montreux Procedure.

The results of water level monitoring provide evidence that over the last several years the Park has not suffered from the early spring water deficits.

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October 2007