



Irene FISCHER

Reports

UBA-93-076

Dokumentation der österreichischen Ramsar-Gebiete

Gebiete gemäß dem "Übereinkommen über
Feuchtgebiete, insbesondere als Lebensraum für
Wasser- und Watvögel, von internationaler
Bedeutung" (Ramsar-Konvention)

Wien, Juni 1993

Bundesministerium für Umwelt,
Jugend und Familie



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Übersetzung (mit Ausnahme der Datenblätter über die Untere Lobau und das Pürgschachen Moor):
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Anhang 1: Klimadaten Sablatnig Moor

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Summary

Wetlands belong to the world's most endangered areas. The disappearance of wetlands threatens the existence of numerous animal and plant species. A convention of worldwide importance for the protection of waterfowl habitats, namely the Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat, was adopted in the town of Ramsar (Iran) in 1971.

Among the most important terms of the Convention for signatory states is the inclusion of at least one wetland area into the "List of Wetlands of International Importance", as well as the protection and maintenance of wetland areas. The international importance of a Ramsar area shall take into account ecological, botanical, zoological, limnological and hydrological criteria.

In Austria, the Ramsar Convention regulations came into effect in 1983. As per 31 June 1993, seven Ramsar areas were registered in the country. These comprise a total of 1,200 sq km. In January 1993, the List of Wetlands of International Importance comprised a total of 590 areas in 74 signatory countries.

In 1992, the Ramsar office in Gland, Switzerland, sent out information sheets on Ramsar Wetlands to all its members in order to update its worldwide databank in Slimbridge (England). In Austria, these sheets were filled in by the Federal Environmental Agency in close cooperation with the provincial environmental authorities. These sheets contain the most important information and constitute an overview of Austria's Ramsar areas.

Zusammenfassung

Feuchtgebiete zählen weltweit zu den gefährdetsten Lebensräumen. Mit dem Verschwinden der Feuchtgebiete ist auch die Existenz zahlreicher Tier- und Pflanzenarten bedroht.

Zum Schutz von Feuchtgebieten, insbesondere als Lebensraum für Wasser- und Watvögel, von internationaler Bedeutung wurde 1971 in der iranischen Stadt Ramsar die Ramsar-Konvention beschlossen.

Zu den wichtigsten Vereinbarungen der Konvention zählen für die Vertragsstaaten u.a. die Aufnahme von mindestem einem Feuchtgebiet in die Liste der Feuchtgebiete von internationaler Bedeutung und die Förderung der Erhaltung von Feuchtgebieten. Die internationale Bedeutung eines Ramsar-Gebiets soll sich auf ökologische, botanische, zoologische, limnologische oder hydrologische Kriterien beziehen.

In Österreich traten die Bestimmungen der Ramsar-Konvention 1983 in Kraft. Mit 31. Juni 1993 sind österreichweit sieben Ramsar-Gebiete ausgewiesen. Die Gebiete umfassen eine Fläche von ca. 1.000 km². Weltweit zählte die Liste international bedeutender Feuchtgebiete im Jänner 1993 insgesamt 590 Gebiete in 74 Vertragsstaaten.

1992 wurden vom Ramsar-Büro (Gland/Schweiz) zur weltweiten Aktualisierung der Datenbank in Slimbridge (England) Erhebungsblätter an die Mitgliedsstaaten gesandt. In Österreich wurden die Datenblätter in enger Zusammenarbeit zwischen dem Umweltbundesamt und den Naturschutzabteilungen der Bundesländer ausgefüllt. Sie beinhalten die wichtigsten Informationen und geben somit einen kurzgefaßten Überblick über die Ramsar-Gebiete Österreichs.

1. Einleitung

Feuchtgebiete zählen weltweit zu den gefährdetsten Lebensräumen. Bei kaum einem anderen Lebensraum mußten in den letzten Jahrzehnten derartige Flächenverluste hingenommen werden. Mit dem Verschwinden der Feuchtgebiete, wie z.B. Auwald, Moor, Feuchtwiese und Röhricht, ist auch die Existenz zahlreicher Tier- und Pflanzenarten bedroht. Diese Tatsache wird durch die Roten Listen gefährdeter Tier- und Pflanzenarten dokumentiert.

Die hohe ökologische Bedeutung der Feuchtgebiete ist u.a. in der Artenvielfalt bei Flora und Fauna, in der Regulierung des Wasserhaushaltes und in der ausgleichenden Wirkung auf das Klima zu sehen. Auch aus landschaftlicher Sicht nehmen Feuchtgebiete eine wesentliche Stellung ein, da der Charakter vieler Landschaften durch Feuchtgebiete wesentlich geprägt wird.

Feuchtgebiete stellen für Menschen wertvolle Erholungsräume dar. Die durch die Nutzungs- und Freizeitaktivitäten verbundenen Eingriffe wirken sich vielfach nachteilig auf den Naturhaushalt aus.

Zum Schutz von Feuchtgebieten, insbesondere als Lebensraum für Wasser- und Watvögel, von internationaler Bedeutung wurde 1971 die Ramsar-Konvention beschlossen.

Die vorliegende Dokumentation gibt einen Überblick über die Situation der derzeit sieben Ramsar-Gebiete Österreichs. Die für das Ramsar-Büro (Gland/Schweiz) bearbeiteten Datenblätter wurden vom Umweltbundesamt in enger Zusammenarbeit mit den Naturschutzabteilungen der Bundesländer erstellt und sind Teil dieses Berichtes (siehe Kap. 5).

2. Ramsar-Konvention

2.1. Wesentliche inhaltliche Aussagen

1971 wurde das "Übereinkommen über Feuchtgebiete, insbesondere als Lebensraum für Wasser- und Watvögel, von internationaler Bedeutung" (Ramsar-Konvention) in der iranischen Stadt Ramsar beschlossen. Österreich hinterlegte am 16. Dezember 1982 seine Beitrittsurkunde beim Generaldirektor der UNESCO in Paris. Die Konventionsbestimmungen traten in Österreich am 16. April 1983 in Kraft (BGBl. 225/83).

Gemäß Artikel 1 des Übereinkommens sind Feuchtgebiete als "Feuchtwiesen, Moor- und Sumpfgebiete oder Gewässer, die natürlich oder künstlich, dauernd oder zeitweilig, stehend oder fließend, Süß-, Brack- oder Salzwasser sind (...)" definiert.

Zu den wichtigsten Vereinbarungen der Konvention zählen:

- Aufnahme von mindestem einem Feuchtgebiet in die Liste der Feuchtgebiete von internationaler Bedeutung (siehe Artikel 2.4.).
- Förderung einer wohl ausgewogenen Nutzung in den übrigen Feuchtgebieten (siehe Artikel 3.1.).
- Jede Vertragspartei trägt dafür Sorge, daß sie bereits bei jeder absehbaren Veränderung der ökologischen Verhältnisse eines in die Liste aufgenommenen Gebietes so schnell wie möglich informiert wird (siehe Artikel 3.2.)

- Förderung der Erhaltung von Feuchtgebieten durch Ausweisung als Schutzgebiete (siehe Artikel 4.1).
- Gegenseitige Absprache der Vertragsparteien über die Umsetzung der mit der Konvention verbundenen Verpflichtungen, vor allem über die mehrere Länder übergreifenden Feuchtgebiete und Einzugsgebiete (siehe Artikel 5).

2.2. Erfolgte Änderungen der Ramsar-Konvention

Änderungen des Textes der Ramsar-Konvention sind u.a. im Pariser Protokoll (1982) enthalten. Es trat 1986, nach Ratifizierung durch mehr als die Hälfte der Vertragsstaaten, in Kraft. Mit dem Pariser Protokoll wurden neue Verfahren zur Änderung des Konventionstextes beschlossen (siehe Artikel 10 bis;). Die Änderungen werden mit Zweidrittelmehrheit der anwesenden Vertragsparteien einer Vertragskonferenz beschlossen.

Anlässlich der Konferenz der Vertragsstaaten in Regina (1987) wurden folgende weitere Änderungen des Konventionstextes beschlossen:

- * In Abständen von höchstens drei Jahren findet ein Treffen aller Vertragsparteien statt (Artikel 6.1). Die Konferenzen haben das Ziel, die allgemeine Aktionsweise des Abkommens zu verbessern. Dazu werden Empfehlungen, Beschlüsse und Entscheide abgefaßt.
- * Schaffung eines eigenen Budgets durch Zahlungsverpflichtung der Vertragsparteien (Artikel 6.5 u. 6.6).

Als einer der letzten Vertragsstaaten hat Österreich im November 1992 das Pariser Protokoll sowie die bei der Regina Konferenz beschlossenen Änderungen akzeptiert.

Die letzte Konferenz der Vertragsstaaten fand 1990 in Montreux (Schweiz) statt. Die fünfte Konferenz wird im Juni 1993 in Kushiro (Japan) stattfinden.

2.3. Organisation

Das Ramsar-Büro in Gland/Schweiz ist mit der Koordination der im Rahmen der Konvention anfallenden Aktivitäten betraut.

Der Ständige Ausschuß (Standing Committee) setzt sich aus Vertretern der Vertragsparteien aus jeder der großen Ramsar Regionen zusammen und tritt mindestens einmal jährlich zusammen. Aufgabe ist die Umsetzung und Begleitung der von der Konferenz der Vertragsstaaten gesetzten Beschlüsse.

In Österreich wurde zur Wahrnehmung der Ramsar-Agenden ein "Ständiges Nationales Ramsar-Komitee" gegründet. Derzeitiger Vorsitz: ORR Dr. Ernst Zanini.

3. Ramsar-Gebiete in Österreich

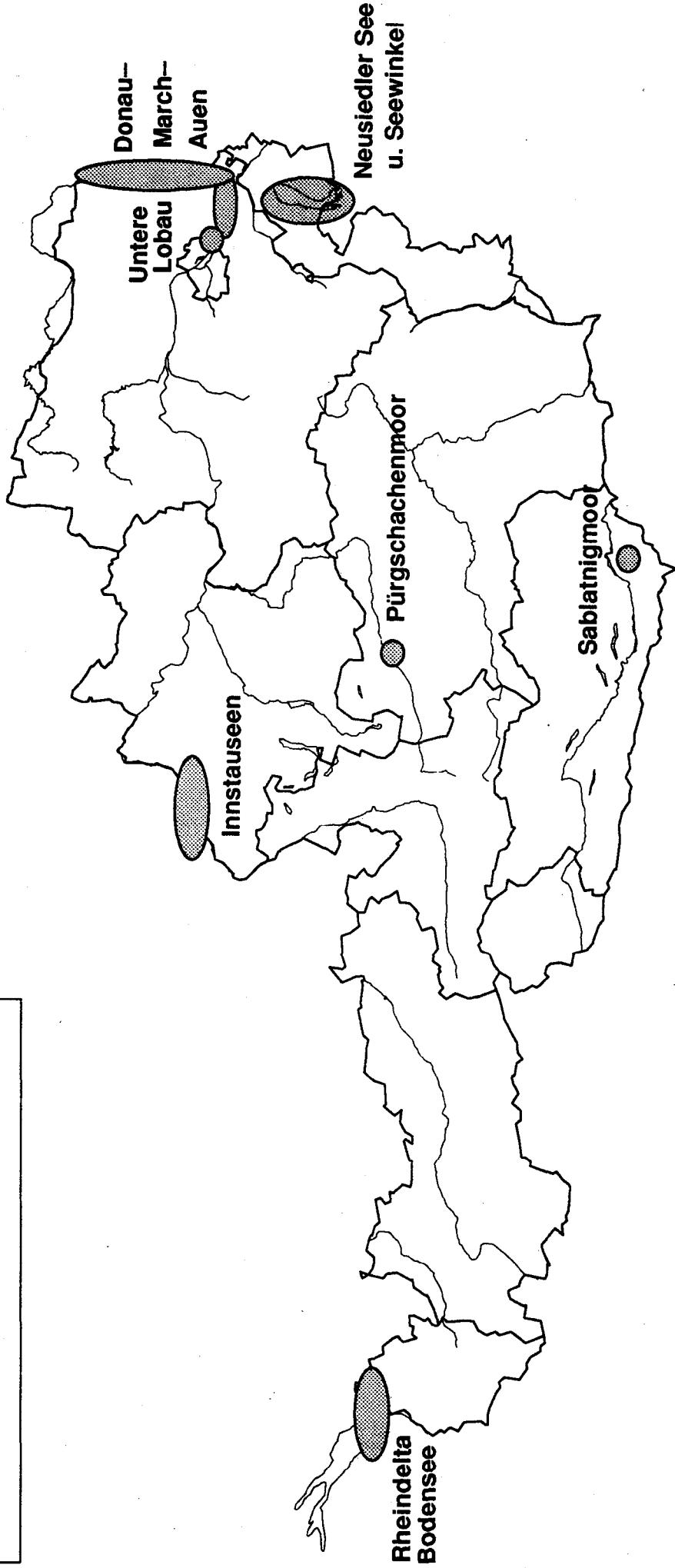
Bei Unterzeichnung der Ramsar-Konvention wurden von Österreich fünf Ramsar-Gebiete für die Liste der Feuchtgebiete von internationaler Bedeutung genannt. Mit Stand 31. Juni 1993 sind österreichweit sieben Gebiete in der Liste ausgewiesen (siehe auch Übersichtskarte; nächste Seite):

- * Gebiet des Neusiedlersees einschließlich der Lacken im Seewinkel (Burgenland)
- * Donau-March-Auen (Niederösterreich)
- * Untere Lobau (Wien)
- * Stauseen am Unterer Inn (Oberösterreich)
- * Rheindelta (Vorarlberg)
- * Pürgschachen Moor (Steiermark)
- * Sablatnig Moor (Kärnten)

Die österreichischen Ramsar-Gebiete umfassen eine Fläche von ca. 1.000 km². Weltweit zählte die Liste international bedeutender Feuchtgebiete im Jänner 1993 insgesamt 590 Gebiete. Diese liegen in insgesamt 74 Vertragsstaaten.

Die internationale Bedeutung eines Ramsar-Feuchtgebietes soll sich auf ökologische, botanische, zoologische, limnologische oder hydrologische Kriterien beziehen (siehe Artikel 2.2 der Konvention). "Das kann z.B. ein für einen seltenen oder ungewöhnlichen Feuchtgebietstyp repräsentativer Standort in der betreffenden biogeographischen Region sein oder aber ein Standort von besonderem Wert für die Erhaltung der biologischen Vielfalt einer Region oder ein Standort, an dem sich jährlich 20.000 Wasservögel einfinden." (LETHIER, 1992). Über die Größe eines Gebietes als Ausweisungskriterium sind in der Ramsar-Konvention keine Angaben enthalten.

**Feuchtgebiete von internationaler
Bedeutung (Ramsar-Abkommen)**



Umweltbundesamt 1993

Feuchtgebiete von internationaler Bedeutung in Österreich

3.1. Bestandsaufnahmen und Maßnahmen zur Flächensicherung in den Ramsar-Gebieten

Donau-March-Auen (38.500 ha)

In den March-Auen sind insgesamt fünf Naturschutzgebiete ausgewiesen.

Im April 1991 wurden die Donau-March-Auen einem Begutachtungsverfahren durch das Ramsar-Büro unterzogen. Ein vom Ständigen Ausschuß ausgearbeiteter Überwachungsmodus ("Monitoring Procedure" - Kontrolle zur Einhaltung der Ramsar Konvention) gibt dem Ramsar-Büro die Möglichkeit, mit den Vertragsparteien zusammenzuarbeiten "und bei etwaigen ökologischen Veränderungen der Ramsar Gebiete eine Lösung zu finden". (SMART, 1991).

Weltweit wurde eine Liste jener Gebiete erstellt, in denen sich "die ökologischen Verhältnisse geändert haben, ändern oder wahrscheinlich ändern werden" (s.Artikel 3.2.).

Die Donau-March-Auen scheinen als einziges der derzeit sieben Österreichischen Ramsar-Gebiete auf der Liste der gefährdeten Ramsar-Gebiete auf.

Eine Expertenkommission "mit internationaler Erfahrung im Schutz von Feuchtgebieten im besonderen von Auwiesen und -wäldern" des internationalen Ramsar Büros erhob im April 1991 den Zustand und die Entwicklung dieses Ramsar-Feuchtgebietes. (SMART, 1991). Die Vorschläge, Kommentare und Empfehlungen wurden in einem Bericht abgefaßt und den zuständigen Behörden vorgelegt.

Aufgrund der Empfehlung dieses Berichtes wurde, initiiert vom Land Niederösterreich, eine Arbeitsgruppe Donau-March-Auen gegründet. An dieser Arbeitsgruppe nehmen, unter der Leitung der Naturschutzabteilung des Amtes der Niederösterreichischen Landesregierung, Vertreter der Raumordnung, des BMUJF, des Distelvereins, des WWF-Österreichs und des Umweltbundesamtes teil. 1993 soll für das Ramsar-Gebiet Donau-March-Auen, unter der Bedachtnahme einer wohlausgewogenen Nutzung ("wise use"), ein Managementplan erarbeitet werden.

Im Zuge der Nationalparkplanung Donau-Auen werden umfassende Grundlagenerhebungen im Auftrag der Bundesländer Niederösterreich und Wien sowie des Bundesministeriums für Umwelt, Jugend und Familie von der Marchfeldbetriebsgesellschaft durchgeführt. Mit einem Abschluß der Arbeiten ist Ende 1993 zu rechnen. Es ist jedoch anzumerken, daß nur das Gebiet der Donau-Auen durch die Aktivitäten der Nationalparkplanung erfaßt wird.

Im Gebiet der March-Auen wurde vom Umweltbundesamt die Situation der Auwiesen erhoben sowie eine Biotopkartierung an der Unteren March durchgeführt. Die Ergebnisse dieser Vorstudie liegen als RAMSAR-Bericht 1, Rheindelta/Marchauen am Umweltbundesamt (Monographien Bd. 18) vor.

Für das gesamte Gebiet der March-Auen wurde 1992 anhand der Grundlagen eines Infrarotluftbildfluges eine luftbildunterstützte Kartierung durchgeführt (GAMPER et al. 1992). Zur Zeit befindet sich am Umweltbundesamt eine Waldbiotopstrukturbewertung in Bearbeitung.

Bezugnehmend auf die Ergebnisse der Monitoring Procedure (vgl. Kap. 3.2.) wird im Auftrag des Landes Niederösterreichs und des Bundesministeriums für Umwelt, Jugend und Familie vom Distelverein und vom WWF ein Managementplan für die Marchauen erstellt.

Einen wesentlichen Beitrag zur Sicherung der in ihrem Bestand gefährdeten Marchwiesen leistet der Distelverein (Orth an der Donau) durch Pachtverträge mit den Bauern (Marchwiesenprogramm).

Untere Lobau (1.039 ha)

Die Untere Lobau ist seit 1978 als Naturschutzgebiet ausgewiesen. Das Schutzgebiet soll in den geplanten Nationalpark Donau-Auen miteinbezogen werden. Grundlagenerhebungen liegen bereits vor.

Stauseen am Unterer Inn (870 ha)

Das Gebiet der Stauseen am Unterer Inn wurde 1978 zum Naturschutzgebiet erklärt. Es deckt im wesentlichen (in der Naturschutzgebietsverordnung wurden die Kraftwerksareale ausgenommen) das Ramsar-Schutzgebiet ab. Die unter Schutz gestellten Flächen sind Eigentum der Inn Kraftwerke AG. Ab dem Frühjahr 1993 wird auf einer 300 ha großen Fläche des Naturschutzgebietes die Jagd auf Wasservögel und Rehwild eingestellt werden.

Im Auftrag des Umweltbundesamtes wurden Grundlagenerhebungen durchgeführt. Neben der Erhebung der naturräumlichen Ausstattung, der Bedeutung für Flora und Fauna, des Zustandes und der Nutzungsintensitäten wurden vor allem Nutzungskonflikte

aufgezeigt. Aufbauend auf diesen Erhebungen werden verschiedene Lösungsansätze zur Umsetzung der Ramsar-Konvention dargestellt. Der Ramsar-Bericht über die Stauseen am Unteren Inn wird 1993 erscheinen.

Rheindelta, Bodensee (1.970 ha)

Das Rheindelta steht seit 1976 unter Naturschutz. Ca. 700 ha sind Landfläche, der Rest umfaßt die Wasserfläche des Bodensees.

Seit 1985 werden Pflegemaßnahmen im Schutzgebiet durchgeführt. In diesem Jahr wurde erstmals ein hauptamtlicher Betreuer bestellt. Seit 1989 versieht zusätzlich ein hauptamtlicher Naturwächter seinen Dienst.

Eine Entwicklungsplan befindet sich derzeit in Ausarbeitung.

In den zwei großflächigen Sperrzonen des Schutzgebietes ist die Wasservogeljagd verboten.

Eine Bestandsaufnahme über das Ramsar-Feuchtgebiet Rheindelta liegt als Ramsar-Bericht 1 (GRABHER, 1990) am Umweltbundesamt auf. Zahlreiche Studien (z.B. über Libellen, Schmetterlinge oder die Auswirkung von Entwässerungen) werden laufend vom Land Vorarlberg in Auftrag gegeben.

Neusiedler See und Lacken im Seewinkel (57.500 bis 62.500 ha)

Wesentliche Bereiche des Ramsar-Gebiets sind im Nationalparkgesetz vom 12.11.1992 zur Schaffung des Nationalparks Neusiedler See erfaßt. Zudem existieren im Areal des Ramsar-Gebiets einige Naturschutzgebiete (z.B. Lange Lacke) und zahlreiche weitere Schutzbemühungen, wie z.B. Pachtverträge und Extensivierung.

Ebenso wie bei den Unterer Innstauseen wird im Auftrag des Umweltbundesamtes derzeit ein umfassender Bericht ausgearbeitet. Ein Zwischenbericht ist für 1993 vorgesehen. Der Abschluß der Arbeiten ist für März 1994 geplant.

Pürgschachen Moor (62 ha)

Das Pürgschachen Moor wurde im September 1991 in die "Liste der österreichischen Feuchtgebiete von internationaler Bedeutung" aufgenommen.

Pächter und Betreuer der zentralen Fläche des Moores, die eine Fläche von ca. 40 ha aufweist, ist der WWF. Derzeit befindet sich eine vom Land Steiermark und BMUJF in Auftrag gegebene Konzeption für einen Managementplan in Ausarbeitung (Koordination: WWF). Hierbei werden Grundlagen zur Erstellung eines detaillierten Managementplanes erhoben und Problemflächen ausgewiesen.

Sablatnig Moor (ca. 100 ha)

Das 96,2 ha große Moor wurde 1992 mit Unterstützung des Landes Kärntens von der Gemeinde Eberndorf angekauft.

Das Sablatnigmoor ist seit 1979 als Naturschutzgebiet ausgewiesen. Es wurde im Mai 1992 in die "Liste der österreichischen Feuchtgebiete von internationaler Bedeutung" aufgenommen.

Um den Schutz dieses international bedeutenden Feuchtgebietes zu gewährleisten, wurde der "Verein der Freunde des Sablatnigmoors" gegründet. Eine umfassende Grundlagenerhebung wird im Auftrag des Amtes der Kärntner Landesregierung vorbereitet.

4. Erstellung eines österreichweiten Ramsarplanes

Zur Umsetzung eines effizienten Vollzugs des Ramsar-Abkommens beschloß der Nationalrat am 22. Oktober 1992 folgende Entschließung:

Die Bundesministerin für Umwelt, Jugend und Familie wird ersucht:

- * Verhandlungen mit den Bundesländern aufzunehmen, zum Schutz bestehender und noch auszuweisender Ramsar-Gebiete
- * in diesem Zusammenhang einen nationalen Ramsarplan zu erarbeiten
- * die hierfür erforderlichen finanziellen Mittel abzuschätzen

Das Umweltbundesamt erarbeitet Grundlagen für diesen nationalen Ramsarplan, die zur Aufnahme von Verhandlungen mit den Bundesländern herangezogen werden sollen. Eine Abschätzung des finanziellen Aufwandes zur Sicherung der ausgewählten potentiellen Ramsar-Gebiete ist vorgesehen.

Im Rahmen der Erstellung des Ramsarplanes wird vom Umweltbundesamt in Zusammenarbeit mit den Naturschutzabteilungen der Bundesländer eine Liste potentieller Ramsar-Gebiete sowie national und international bedeutender Feuchtgebiete in Österreich erstellt.

5. Dokumentation der Ramsar-Gebiete Österreichs

zur weltweiten Aktualisierung der Datenbank in Slimbridge (England) über die international bedeutenden Ramsar-Gebiete wurden 1992 vom Ramsar-Büro (Gland/Schweiz) auszufüllende Erhebungsblätter an die Mitgliedsstaaten gesandt.

In Absprache mit dem gemeinsamen Delegierten der Bundesländer für das Ramsar-Abkommen, Herrn ORR Dr. Ernst Zanini, und dem BMUJF, wurden die von den Bundesländern Burgenland, Kärnten, Steiermark, Vorarlberg und Wien ausgefüllten Datenblätter vom Umweltbundesamt gesammelt. Die Datenblätter der Ramsar-Gebiete Donau-March-Auen (Niederösterreich) und Stauseen am Unterer Inn (Oberösterreich) wurden vom Umweltbundesamt ausgefüllt. Anhang II umfaßt den Kriterienkatalog, der u.a. die Code-Listen der Feuchtgebietstypen und der Ramsar Kriterien beinhaltet.

Die übersetzten Datenblätter wurden mit entsprechendem Kartensmaterial im Dezember 1992 gesammelt nach Slimbridge (England) übermittelt.

Die Datenblätter beinhalten die wichtigsten Informationen und geben somit einen kurzgefaßten Überblick über die Ramsar-Gebiete Österreichs und sind nachfolgend aufgelistet.

Die bei den Punkten 10 (Wetland type) und 30 (Reasons for inclusion) aufscheinenden Codes sind im Anhang II (Information Sheet on Ramsar-Wetlands) erläutert.

In Hinblick auf die 1993 in Japan geplante 5. Konferenz der Vertragsstaaten der Ramsar-Konvention sind diese nach Slimbridge übermittelten Informationen auch für die Erstellung eines aktuellen weltweiten "Directory of Wetlands" von wesentlicher Bedeutung.

Information Sheet on Ramsar Wetlands

As approved by Rec.C.4.7 of the Conference of the Contracting Parties, Montreux, Switzerland - July 1990

NOTE: Please read the accompanying guidelines before attempting to complete this form. An example of a completed data sheet is also included.

Completed sheets should be returned to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

1. Country: Austria

2. Date: Nov. 1992

3. Ref: office use only

4. Name and address of compiler: G. Dick, A. Grüll

Biological study group, Lake Neusiedl, A-7142 Illmitz

Tel.: 02175/2328

Fax.: 02175/2328-10

5. Name of wetland: NEUSIEDLERSEE, SEEWINKEL

6. Date of Ramsar designation: 16. April 1983

7. Geographical coordinates: $47^{\circ}41'$ - $47^{\circ}58'$ N, $16^{\circ}40'$ - $17^{\circ}06'$ E

8. General location: (e.g. administrative region and nearest large town)

Province of Burgenland (e.g. Illmitz, 72 km SE of Vienna)

9. Area: (in hectares)

Neusiedlersee approx. 250 - 300 sq km; Seewinkel 300 sq km, Hanság approx. 25 sq. km

10. Wetland type: (see attached classification, also approved by Montreux Rec.C.4.7)

H Q, R

11. Altitude: (average and/or maximum & minimum)

113m

12. Overview: (general summary, in two or three sentences of the wetland's principal characteristics)

Lake Neusiedl: Shallow lake in flat landscape, with wide phragmites belt; a canal, the "Einserkanal", completed in 1910, is an artificial canal, which reins in the floods in spring.
Seewinkel: Approx. 80 saline small-sized shallow lakes, as well as remains of partly saline humide pastures in an area of intensive agricultural use. Hanság: Former fen, however, most of it is cultivated today.

13. Physical features: (e.g. geology; geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth; water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

a) Water regime: Lake Neusiedl has only one major overground tributary; the water level of the small lakes varies, they dry out quite often.

b) Water depth:

Lake Neusiedl 1.5 m; small lakes 30 - 60 cm.

c) Salinity/acidity: Lake Neusiedl approx. 1,200 mg/l; pH 8.5 - 9.1; small lakes: soda concentration of 5 - 50g/l, pH 8.4 - 11.0

d) Fluctuations/permanence: Floods of Lake Neusiedl were stopped with the construction of the "Einserkanal". Most of the small lakes dry out in summer.

e) Climatic conditions: Transition towards continental steppe climate. Hot, dry summers, snowless winters, precipitation less than 600 mm, annual average temperature 10 centigrade.

14. Ecological features: (main habitats and vegetation types)

Principal vegetation: Phragmites, Halophyten flora

a) Aquatic vegetation: Except of rees, Utricularia vulgaris, along the small lakes predominantly Potamogeton pectinatus and Cladophora.

b) Plant communities in adjacent areas: Along the orders of small lakes saline communities (Festuca, Artemisia) with Lepidium, along the lake's border pastures, transition to fen and Mangno-Caricio (large sedge communities).

15. Land tenure /ownership of:

(a) site Lease of the southern part of the lake, as well as of all connected pastures by the government; large estates and private property.

(b) surrounding area Large estates and private property.

16. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes

wh a) Protected areas: Small Lakes: Oberstinker, Untersinker, Illmitzer Zicksee, Kirchsee, "Fuchslochlaecke, Lange Lacke, Obere Halbjochlaecke, Wörtlenlacken; Hutweiden/Lange Lacke und grass land /Illmitz; Zitzmannsdorfer Wiesen and Hansag. Lake Neusiedl and Seewinkel are landscape-protected areas with restricted use. b) Other measures: Along the Lange Lacke protected area for water fowl, prohibition to hunt for waterbirds. Controlled use of land for cattle grazing in protected areas, planned cultivation of pastures (controlled hay harvest), reduction in the yield of nutritive substances. Law for National Park "Neusiedlersee" exists since November 1992.

17. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

Restriction of use of reed at Lake Neusiedl. Re-establishment of natural water stat.

Extension of area for cattle grazing. Extension of protected area for water fowl.

Restriction of fishing. Reduction of soil erosion and thus a reduction of nutritive substances in the water.

18. Current land use: principal human activities in:

(a) site

Harvest of reed, hunting of waterbirds (goose, duck), fishing, agricultural use in the vicinity of small lakes.

(b) surroundings/catchment

Intensive agriculture, especially viticulture. At present reduced use for viticulture.

19. Disturbances/threats, including changes in land use and major development projects:

(factors which may have a negative impact on the ecological character of the wetland)

(a) at the site

Hunting of water birds, water and soil eutrophication, water bird botulism, tourism, pastures are no longer used (small lakes are overgrowing with reed), interference in the water stat of small lakes further loss of pastural land to agriculture.

(b) in the surroundings/catchment

Strong eutrophication due to agricultural landuse in the catchment area of Lake Neusiedl and the small lakes in the Seewinkel (Lacken), problem of fertilizer transfer during wind-erosion and running water (wulka). Decrease of groundwater level with agricultural fountains.

20. Hydrological and physical values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc.)

Groundwater s. BFB-Bericht (Biologische Station Neusiedler See) 58, 39-50, 109-125, 63, 5-14. Neusiedler see and most of the smaller lakes of the Seewinkel are drained by "Einserkanal" and a system of smaller channels, so springtime floods are strongly reduced. Sediment trapping (for elimination of nutrients) is planned for the estuary of the Wulka.

21. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

Tourism, ornithologists, area with specific scientific qualities, studies carried out by the Biological Studies Group Neusiedler See and the University of Vienna (numerous ornithological theses). Fishing since ancient times.

22. Noteworthy fauna: (e.g. unique, rare, endangered, abundant or biogeographically important species; include count data etc.)

Waterbirds (Breeding birds/in pairs): Podiceps cristatus, Podiceps nigricollis (10), Anser anser (400), Aythya nyroca, Netta rufina (5), Anas acuta (5), Anas strepera (30), Anas querquedula (20), Anas clypeata (180). Migratory birds (Maxima): Anser anser (6.000), Anser albifrons (3,000), Anser fabalis (20,000), in recent extremely dry years most geese stay overnight in Hungary and partly use arable land in Austria to feed on. Anas crecca (10,000), Anas clypeata (1,500), Anas querquedula (300), Netta rufina (50). Other fauna (Breeding birds/in pairs): Egretta alba (200-400), Ardea purpurea (100), Ardea cinerea (20-45), Ixobrychus minutus, Botaurus stellaris, Ciconia ciconia (20), Plateala leucorodia (0-20), Circus pygargus (5), Circus aeruginosus (130), Porzana porzana, Porzana parva, Otis tarda (10-15), Charadrius alexandrinus (15-30), Charadrius dubius (60), Recurvirostra avosetta (70-100), Numenius arquata (5), Limosa limosa (40-130), Tringa totanus (100-200), Gallinago gallinago (5), Sterna hirundo (60), Asio flammeus (max. 10), Upupa epops (30), Motacilla flava (200), Luscinia svecica (150), Lanius minor (5). Fish: Anguilla anguilla, Cyprinus carpio Esox lucius, Alburnus alburnus, Blicca bjoerkna etc.

23. Noteworthy flora: (e.g. unique, rare, endangered, or biogeographically important species/communities etc.)

Special floral values:

Aster tripolium pannonicus, Leopidium cartilagineum, Salvia austriaca, Iris pumila, Astragalus austriacus, Triglochin maritima, Scorzonera parviflora.

Neusiedler See, Seewinkel

24. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

Biologische Station Neusiedler See, A-7142 Illmitz and University of Vienna

25. Current conservation education: (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

There is only one information centre at Lange Lacke/Apetlon (Seewinkelhof, WWF); education/information for students, tourists and local people is also provided by the Biologische Station. Some observation towers at the lakes and in Hansag (Great Bustard), new booklets and in summer lectures for tourists in the villages.

26. Current recreation and tourism: (state if wetland used for recreation/tourism; indicate type & frequency/intensity)

Typical tourism (sailing - surfing) in almost all villages around Neusiedler See, but no tourism in the southern part of the lake (National Park - nature zone). In most villages also larger holiday settlements in the reedbelt. On small roads around many lakes biking with high intensity.

27. Management authority: (name and address of body responsible for managing the wetland)

Amt der Burgenländischen Landesregierung
Abteilung IV - Naturschutz; A-7000 Eisenstadt

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept of Environment etc.)

Amt der Burgenländischen Landesregierung
Abteilung IV - Naturschutz; A-7000 Eisenstadt

29. Bibliographical references: (scientific/technical only)

- BÖCK, F.; AUBRECHT G. (1985): Österreichische Gewässer als Winterrastplätze für Wasservögel. Grüne Reihe des Bundesministeriums für Gesundheit und Umweltschutz, Band 3, Wien.
DICK, G., HUDEC, K. and P. MACHACEK (1984): Sommerlicher Zwischenzug der Graugänse (Anser anser) des Neusiedler See-Gebietes nach Südmähren. Die Vogelwarte 32, 251-259.
ARBEITSGEMEINSCHAFT GESAMTKONZEPT NEUSIEDLER SEE (1984): Forschungsbericht 1981 - 1984. Wissenschaftliche Arbeiten aus dem Burgenland, Sonderband 2.

30. Reasons for inclusion: (state which Ramsar criteria - as adopted by Rec.C.4.15 of the Montreux Conference - are applicable)

1b, 1c, 2a, 2b, 2c, 3a

31. Map of site (please enclose the most detailed and up-to-date map available - preferably at least 1:25,000 or 1:50,000)

ÖK numbers 78, 79, 108 and 109 (M 1:50000)

Please return to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

Telephone: 44 - (0)453 890634

Telefax: 44 - (0)453 890827

Telex: 43 71 45 WWF-G

Information Sheet on Ramsar Wetlands

As approved by Rec.C.4.7 of the Conference of the Contracting Parties, Montreux, Switzerland - July 1990

NOTE: Please read the accompanying guidelines before attempting to complete this form. An example of a completed data sheet is also included.

Completed sheets should be returned to: T.A. Jones, Ramsar Database, WRB, Slimbridge, Gloucester GL2 7BX, England

1. Country: Austria

2. Date: 2. 4.12.1992 3. Ref: office use only

4. Name and address of compiler:

Ing. Irene Fischer; Umweltbundesamt (Federal Environmental Agency), spitzelauer Lände 5, A-1090 Wien
Tel.: 0222-31304; Telefax: 0222-31304400

5. Name of wetland: Donau-March-Auen

6. Date of Ramsar designation: 16.4.1983

7. Geographical coordinates: $48^{\circ}12'N$, $16^{\circ}28'E$ - $48^{\circ}11'N$, $16^{\circ}58'E$ and $48^{\circ}11'N$, $16^{\circ}58'E$ - $48^{\circ}43'N$,

8. General location: (e.g. administrative region and nearest large town)

The area is situated in the area bordering Slovakia, east of Vienna, Austria.

9. Area: (in hectares)

38500 ha

10. Wetland type: (see attached classification, also approved by Montreux Rec.C.4.7)

M, N, T

11. Altitude: (average and/or maximum & minimum)

148m

12. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

The Donau-March-Auen (riverine and flood-plain forests) constitute the largest comprehensive riverine and flood-plain forests of Central Europe. The Ramsar site is one of the last natural flowing parts of the river Danube, whereby the dynamics is still intact. The riverine forests represent the transition from the eastern steppe-area to the alpine region of Central Europe. Noteworthy is the high number of species of flora and fauna.

13. Physical features: (e.g. geology; geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth; water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

Holocene riverine and flood-plain forests, pleistocene terrace (Würm, Riss)

Donau-Auen: Calcerous gravel, heavy and dense; March-Auen: acid sand, porous, light. Average annual temperature: $9,8^{\circ}C$; Average annual precipitation: 550 mm.

The Danube has mountainous character whilst the March has pannonic features. The Danube riverine forest is regularly flooded in June, when the snow melts in the mountains. The spring floods of the March, the Danube's floods in summer, which reach the March area, as well as the high ground water level in the Danube riverine forest, determine the ecological factors in the area. The rude material which was transported from the landscape of the river and riverine forest of the Danube.

The March has a bad water quality, while the Danube shows a biological water quality of II-III.

14. Ecological features: (main habitats and vegetation types)

The Ramsar area represents a unique ecological situation: the Danube, a mountain river meets an pannonic river, the March, which shows SE-European character traits.

The site comprises a strip of land either side of the River Danube between the state of Vienna and the Slovakian border; a strip of land along the River March (Morava) from its confluence with the Danube to the south of the Slovakian town of Breclav (Hainburg to Hohenau); and a strip along the Thaya from Bernhardstal to Hohenau. It contains riverine marshes, ponds, oxbow lakes and meadows with vegetation, including alder (*Alnus* sp.) and original woodland. These areas comprise the largest remaining tract of near-natural to natural riverine and flood plain forest in Central Europe.

15. Land tenure /ownership of:

(a) site

Mostly federal forests; some estates, WWF Austria and private property owners.

(b) surrounding area

intensively used private farmland

16. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which)
The site is partly protected within an area of six nature reserves, totalling 2213 ha, including Marchauen-Marchegg Nature Reserve (1.150 ha) with 50% WWF Austria ownership and 50% private ownership. The Landscape Protection Area comprises 2000 ha and the Biosphere Reserve "Untere Lobau" 1000 ha.

To safeguard the typical wet meadows alongside the March, management measures (mowing, hay-harvest) are taken by the landscape management society "Distelverein".

To stabilize the groundwater aquifer an artificial canal was built through the Marchfeld, upstream Vienna, to bring water from the Danube to the Rußbach.

17. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

The National Park "Donau-Auen" is under preparation, as well as the study of comprehensive management plans. The existing meadow management along the March is to be extended.

Currently a Ramsar working group was set up by the Federal Ministry of the Environment, Youth and Family and the state government of Lower Austria to develop a site plan, taking Ramsar rules into consideration.

18. Current land use: principal human activities in:

(a) site

Forestry, agriculture, hunting, fishing, filter beds of a sugar-refinery, recreation area for neighbouring settlements, canoeing

(b) surroundings/catchment

agriculture, hunting

19. Disturbances/threats, including changes in land use and major development projects:

(factors which may have a negative impact on the ecological character of the wetland)

(a) at the site

The sinking ground water level in the riverine forest due to the deepening of the Danube into its river bed, constitutes a danger for the dynamics of the riverine forest. Donau-Elbe-Oder Canal, plans for various power plants at the Danube, increased recreation activities, manuring of the meadows, drastic reduction of meadows and natural wood areas.

(b) in the surroundings/catchment

agriculture

20. Hydrological and physical values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc.)

The complete part of the river Danube east of Vienna was regulated in the last century. Nevertheless, both the groundwater and flood dynamics for large riverine areas remained. Depending of the Danube's bed due to erosion, the fall of the groundwaterlevel and the big flood control dam (Hubertusdamm) already built last century lead to the drying up of large parts of the riverine forests.

During the last century, regulation work along the river March was carried out. The surrounding area of the River March, which is used agriculturally, was protected by dams against flooding.

Danube (Furcation type): Height of fall 40 cm/km

March (Meandering type): Height of fall 16 cm/km

21. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

The riverine forest and flood-plains of the Donau-March is of great importance for securing a balanced water economy in the region, whose precipitation is rather poor. The riverine forest is also a retention area for floods. A great potential exists for fishing and forestry, and hunting has always played a big role. In recent years, the Donau-Auen have become very popular as recreation area.

22. Noteworthy fauna: (e.g. unique, rare, endangered, abundant or biogeographically important species; include count data etc.)

Breeding species: *Ciconia nigra* (6 pairs), *C. ciconia* (30 pairs), *Pernis apivorus*, *Milvus migrans* (20 pairs), *Circus aeruginosus* (1), *C. pygargus*, *Crex crex*, *Alcedo atthis*, *Picus canus*, *Dryocopus martius*, *Dendrocopos medius*, *Sylvia nisoria*, *Ficedula albicollis*, *Lanius collurio*, *Tringa totanus*, *Podiceps nigricollis*, *Limosa limosa*, *Tachybaptus ruficollis* etc.

23. Noteworthy flora: (e.g. unique, rare, endangered, or biogeographically important species/communities etc.)

Vegetation of the Danube riverine forest: demontan-pannonic, vegetation of the March riverine forest: panonic-pontic. About 650 plant species can be found in the Donau riverine forests. Some plants of the SE European riverside reach their westerly border in the March riverine forests, e.g. *Acer tartaricum*, *Urtica kioviensis*, *Leucojum aestivum*, *Rumex altissima*, *Eryngium planum*, *Gratiola officinalis* and *Clematis integrifolia*.

- 24. Current scientific research and facilities:** (e.g. details of current projects; existence of field station etc.)
The area is a genetic reservoir, and as such it is irreplaceable for research work. Testing methods, as well as studies, have been carried out since 1990, as regards the possibility of setting up a National Park "Donau Auen". Foundation research of the March riverine forest is carried out by the Federal Environmental Agency with the help of aerial photographs. National Park Institute Donau-Auen of the Austrian Academy of Sciences, Institute of Applied Eco-Ethology, situated in Haringsee.
- 25. Current conservation education:** (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

Public relations activities were so far carried out only by the WWF. Information and education possibilities are planned in conjunction with the establishment of the National Park "Donau-Auen".

- 26. Current recreation and tourism:** (state if wetland used for recreation/tourism; indicate type & frequency/intensity)

No recreational facilities exist in the area of the March riverine forest. Only temporary tourism in the region of the "Marchfeld Schlösser" (Castles). In the Donau-Auen tourism is increasing rapidly, due to the vicinity of Vienna. The area is used for hiking, biking, as well as for canoeing.

- 27. Management authority:** (name and address of body responsible for managing the wetland)

Amt der Niederösterreichischen Landesregierung, Abt. II/3, Angelegenheiten des Naturschutzes, Dorotheergasse 7, A-1010 Wien
Tel.: 0222-53110; Telefax: 0222-53110 5280

- 28. Jurisdiction:** (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept of Environment etc.)

Amt der Niederösterreichischen Landesregierung, Abt. II/3, Angelegenheiten des Naturschutzes, Dorotheergasse 7, A-1010 Wien
Tel.: 0222-53110; Telefax: 0222-53110 5280

- 29. Bibliographical references:** (scientific/technical only)

- 30. Reasons for inclusion:** (state which Ramsar criteria - as adopted by Rec.C.4.15 of the Montreux Conference - are applicable)

1c, 1d, 2a, 3b, 3c

- 31. Map of site** (please enclose the most detailed and up-to-date map available - preferably at least 1:25.000 or 1:50.000)
ÖK numbers: 26, 43, 59, 60 and 61 (M 1:50000)

Please return to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

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Information Sheet on Ramsar Wetlands

As approved by Rec.C.4.7 of the Conference of the Contracting Parties, Montreux, Switzerland - July 1990

NOTE: Please read the accompanying guidelines before attempting to complete this form. An example of a completed data sheet is also included.

Completed sheets should be returned to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

1. Country: Austria

2. Date: 29.10.1992

3. Ref: office use only

4. Name and address of compiler:

Townhall of Vienna

Magistrat 22

Tel.: 0043 222/4000-88219

A-1082 Vienna

Fax: 0043 222/4000-88215

5. Name of wetland:

Untere Lobau

6. Date of Ramsar designation: 16. April 1983

7. Geographical coordinates: 48°10'N, 16°30'E

8. General location: (e.g. administrative region and nearest large town)

south-east of the centre of the city of Wien (Vienna).

Untere Lobau is contiguous with Donau-March-Auen Ramsar site.

9. Area: (in hectares)

1039ha

10. Wetland type: (see attached classification, also approved by Montreux Rec.C.4.7)

M,N,S,T,U

11. Altitude: (average and/or maximum & minimum)

151 m

12. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

Alluvial riverside with forest, meadows and water areas. Cutoff from the floods of the river Danube since the last century (embankment).

13. Physical features: (e.g. geology; geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth; water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

Historical Danube river floodplain with well-developed numerous oxbow lakes, backwaters, sand and gravel banks, reed beds, periodical pools as well as dry gravel ridges ("Heissland").

Flat relief; different hydrological regime corresponding to Danube river; gravel and sand sediments! The climate of this area is very dry and warm (+9.8 °C). Yearly average rainfall is about 500 - 600 mm.

14. Ecological features: (main habitats and vegetation types)

Reed beds; soft wood riverside forest; Hardwood forest; Dry and hot sand and gravel areas meadows.

15. Land tenure /ownership of:

(a) site

Federal district of Vienna

(b) surrounding area Multiple private ownership

16. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made; management practices; whether an officially approved management plan exists and whether it has been implemented)

Nature reserve since 9. August 1978. It is intended to include this Ramsar site in the planned Nationalpark "Donau-Auen".

17. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

none

18. Current land use: principal human activities in:

(a) site

(b) surroundings/catchment

19. Disturbances/threats, including changes in land use and major development projects:

(factors which may have a negative impact on the ecological character of the wetland)

(a) at the site

Rising recreation because of the vicinity of the city of Vienna (short-term recreation!)

(b) in the surroundings/catchment

20. Hydrological and physical values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc.)

The ground water of this area is used for drinking purposes in the city of Vienna (4 ground water wells)

21. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

The area has been used by humans since ancient times (fishing, hunting, agriculture, timber production). Scientific research, outdoor recreation!

22. Noteworthy fauna: (e.g. unique, rare, endangered, abundant or biogeographically important species; include count data etc.)

23. Noteworthy flora: (e.g. unique, rare, endangered, or biogeographically important species/communities etc.)

Lilium bulbiferum, Lilium martagon, Helleborus dumetorum, Nuphar sp., Nymphaea sp., Sparganium sp., Thypha sp., Stratiotes aloides, Sagittaria sagittifolia
Numerous orchids on the dry gravel ridges!

24. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

Several research projects have been carried out in the area. Scientific activities are mainly concerned with botanical and limnological problems. Biotope mapping; etc.

25. Current conservation education: (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

Folder only!

26. Current recreation and tourism: (state if wetland used for recreation/tourism; indicate type & frequency/intensity)

No facilities for recreation, except paths and trails

27. Management authority: (name and address of body responsible for managing the wetland)

Town hall of Vienna; MA 22
A-1082 Vienna
Tel.: 0043 222/4000-88219
Fax: 0043 222/4000-88215

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept of Environment etc.)

Local administration of nature protection
Townhall of Vienna, MA 22

29. Bibliographical references: (scientific/technical only)

Biotop mapping
Several scientific research projects

30. Reasons for inclusion: (state which Ramsar criteria - as adopted by Rec.C.4.15 of the Montreux Conference - are applicable)

1a, 1c
2a, 2b, 2c
3b

31. Map of site (please enclose the most detailed and up-to-date map available - preferably at least 1:25,000 or 1:50,000)

Ök number 59

Please return to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

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Information Sheet on Ramsar Wetlands

As approved by Rec.C.4.7 of the Conference of the Contracting Parties, Montreux, Switzerland - July 1990

NOTE: Please read the accompanying guidelines before attempting to complete this form. An example of a completed data sheet is also included.

Completed sheets should be returned to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

1. Country: **AUSTRIA**

2. Date: Nov. 1992

3. Ref: office use only

4. Name and address of compiler:

Ing. Irene Fischer

Umweltbundesamt (Federal Environmental Agency)

Spittelauer Lände 5, A-1090 Wien

Tel.: 0222-31304; Fax: 0222-31304400

5. Name of wetland: STAUSEEN AM UNTEREN INN (Lower Inn Reservoirs)

6. Date of Ramsar designation: 1983

7. Geographical coordinates: $48^{\circ}16'0''$ - $48^{\circ}22'20''$ N $15^{\circ}4'50''$ - $13^{\circ}24'30''$ E

8. General location: (e.g. administrative region and nearest large town)

Province of Upper Austria, approx. 90 km west of Linz, on the border to Germany

9. Area: (in hectares)

870 ha

10. Wetland type: (see attached classification, also approved by Montreux Rec.C.4.7)

6

11. Altitude: (average and/or maximum & minimum)

average 330m, Altitude 318 - 340m

12. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

A 24.6 km length of the River Inn, comprising three reservoirs with riverine forests, islands and sandflats. The area came into being after the construction of power plants about 50 years ago. The area at the Lower Inn is one of Central Europe's main waterbird breeding and wintering places. One can find about 15 species of birds of regional and national importance.

13. Physical features: (e.g. geology; geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth; water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

The riverine forest is a result of successional stages of vegetation caused by sedimentation. The average temperature is 8.3 Centigrade. Fog occurs on 60-100 days in the period October - January. The annual average precipitation, mostly in June, July, is 840mm. The water quality of the River Inn in the Ramsar area is II on the IV item scale.

14. Ecological features: (main habitats and vegetation types)

The Lower Inn comprises extensive islands and sandflats, as well as young riverine forests between the river bed and the area near the natural steep banks and dams. Reeds are found at the river bank, so are willows and alderbusch. On the sandbanks, which are transformed every year, one can find annual plant communities.

15. Land tenure /ownership of:

(a) site Inn Kraftwerke AG, Verbundgesellschaft.

(b) surrounding area private property owners

16. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made; management practices; whether an officially approved management plan exists and whether it has been implemented)

In 1978, the Province of Upper Austria declared the Lower Inn as Nature Reserve. A 200m wide area along the River Inn is designated as Landscape Protected Area, which however, covers landscape issues only.

17. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

Restriction of fishing and boating.

From spring 1993 the hunting of waterbirds shall be prohibited. In the Nature Reserve, which is an area of about 300ha, the feeding of ducks and geese shall be discontinued.

18. Current land use: principal human activities in:

(a) site

Fishing, hunting, sports (boating, skating), tourism

(b) surroundings/catchment Along the Ramsar area runs a bicycle and hiking trail;
Agriculture

19. Disturbances/threats, including changes in land use and major development projects:

(factors which may have a negative impact on the ecological character of the wetland)

(a) at the site

Disturbances in the breeding period through fishing. Endangered and potentially endangered waterbirds species are hunted. The impact of hunting also disturbs roosting birds. Feeding of waterbirds has led to a deterioration in the water quality. Botulism has been observed.

(b) in the surroundings/catchment

Eutrophication by nutrients entering from neighbouring agriculturally-used areas.

20. Hydrological and physical values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc.)

Development of power plants for hydroenergy along the River Inn was started in the 1920's. At present, the River Inn is a chain of artificial reservoirs within the Ramsar area. Disruption of the river continuum led to a reduction of the river's velocity. Due to the fact of continuous sedimentation, islands were formed. Low water areas and bays (e.g. Hagenauer Bucht) developed.

The River Inn compares to a mountain river with glacial drain. The velocity of the water amounts $721\text{m}^3/\text{s}$, at medium flood rates with $2750\text{ m}^3/\text{s}$. The River Inn carries a huge load of sediments. Continuous sedimentation has locally led to degradation of ecologically important successional stages.

21. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

Until the 1850's the natural River Inn and the bordering riverine forest were used for shipping, fishing and forestry. Today, the River Inn is primarily used for hydroenergy (power plants). Forestry has no importance.

The "Hagenauer Bucht" is a recreation area.

Because of the important numbers of migrating, wintering and breeding birds as well as other endangered species this site is of a high scientific interest.

22. Noteworthy fauna: (e.g. unique, rare, endangered, abundant or biogeographically important species; include count data etc.)

Breeding birds:

Nyctocorax nyctocorax (10-12 pairs, 1990); *Sterna hirundo* (7 pairs, 1990); *Ardea cinerea*; *Limosa limosa*; *Podiceps nigricollis* (very rare); *Circus aeruginosus*; *Alcedo atthis* *Ixobrychus minutus*, *Pernis apivorus*, *Sterna hirundo*, *Picus canus*, *Luscinia svecica*

Passage and wintering species:

Anas platyrhynchos (12.000); *Anas strepera* (max. 1.900); *Aythya fuligula* (max. 20.000, 1989); *Aythya ferina* (max. 13.000); *Bucephala clangula* (4000, 1977); *Anas crecca* (max. 4.200); *Fulica atra* (max. 15.000); *Philomachus pugnax* (13.000, 1987); *Larus melanocephalus*, *Larus canus*, *Numenius arquata* (400, 1987); *Calidris ferruginea* (200, 1987); *Phalacrocorax carbo*; *Cygnus olor* (500, 1973); *Vanellus vanellus* (max. 8.000) *Bucephala clangula* (4000). Other passage species include: *Tringula glareola* and *Chlidonias niger*

Replace of *Castor fiber*.

23. Noteworthy flora: (e.g. unique, rare, endangered, or biogeographically important species/communities etc.)

Rare for Austria: *Hippuris vulgaris*, *Batumus umbellatus*

24. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

Research projects are carried out by REICHHOLF, e.g. a study of the ecosystem at the reservoirs at the Lower Inn.

Counts of waterbirds and faunistic monitoring are carried out by Austrian and Bavarian ornithologists.

25. Current conservation education: (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

The provincial government of Upper Austria has set up information boards about the Lower Inn area.

26. Current recreation and tourism: (state if wetland used for recreation/tourism; indicate type & frequency/intensity)

Winter: skating

Summer: rowing boats

27. Management authority: (name and address of body responsible for managing the wetland)

Amt der Oberösterreichischen Landesregierung, Abt. Naturschutz,
Promenade 31, A-4020 Linz
Tel.: 0732-2720; Fax: 0732-27201668

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept of Environment etc.)

Amt der Oberösterreichischen Landesregierung, Abt. Naturschutz,
Promenade 31, A-4020 Linz
Tel.: 0732-2720; Fax: 0732-27201668

29. Bibliographical references: (scientific/technical only)

REICHHOLF,J. et al. (1982): Die Stauseen am unteren Inn - Ergebnisse einer Ökosystemstudie. ANL. Laufen.
A monograph carried out by the Federal Environmental Agency about the area is in process of being published, envisaged publication date 1993. Regular faunistic papers are compiled in a Bibliography of the Lower Inn.

30. Reasons for inclusion: (state which Ramsar criteria - as adopted by Rec.C.4.15 of the Montreux Conference - are applicable)

1d, 2a, 2b, 2c, 3a

31. Map of site (please enclose the most detailed and up-to-date map available - preferably at least 1:25.000 or 1:50.000)
ÖK numbers: 27, 28 and 29 (M 1:50000)

Please return to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

Telephone: 44 - (0)453 890634

Telefax: 44 - (0)453 890827

Telex: 43 71 45 WWF-G



Information Sheet on Ramsar Wetlands

As approved by Rec.C.4.7 of the Conference of the Contracting Parties, Montreux, Switzerland - July 1990

NOTE: Please read the accompanying guidelines before attempting to complete this form. An example of a completed data sheet is also included.

Completed sheets should be returned to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

1. Country: Austria

2. Date: 12.11.1992 3. Ref: office use only

4. Name and address of compiler:

Dipl.Ing. Wolfgang Flor, Amt der Vorarlberger Landesregierung Abt. IVe, Landhaus,
A-6901 Bregenz; Tel.: 05574- 511 Fax.: 05574- 51180

5. Name of wetland: Rheindelta

6. Date of Ramsar designation: 1982

7. Geographical coordinates: $9^{\circ}34'$ - $9^{\circ}40'$ E; $47^{\circ}28'$ - $47^{\circ}31'$ N

8. General location: (e.g. administrative region and nearest large town)

Vorarlberg, 4 km west of Bregenz

9. Area: (in hectares)

1970 ha

10. Wetland type: (see attached classification, also approved by Montreux Rec.C.4.7)

N, U

11. Altitude: (average and/or maximum & minimum)

400 m

12. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

Roughly 2/3 of the area is covered with water, most of which is flat water area and dries out in winter. Approx. 450 ha are fens, large sedge communities and reed beds. The Rhine's delta is the most important breeding place and top over place for waders at the Bodensee. It is also a very important winter resting place for water birds in Austria.

13. Physical features: (e.g. geology; geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth; water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

The Rhine Delta lies between the original Rhine estuary in the west (Alter Rhein) and the Rhine Canal in the East, which was built at the turn of the century. The development goes back to sedimentation processes of the Alpine Rhine, which carries approx. 3 mt of sediments annually into the Bodensee. Due to the alluvial development the height differences are very small. Before construction of the dam the annual differences of the water level led to large-scale regular floods. Today only those mire areas north of the dam are flooded. Near the river estuaries, mires were formed on which one can find fen and transition mire vegetation today. These areas are used extensively as humid grasslands (water meadows). Additionally ca. 50 ha in the nature reserve is being used intensively for agriculture.)

14. Ecological features: (main habitats and vegetation types)

The large flood water zones are important feeding areas for water birds. About 200 ha Phragmitetum communis and Caricetum elatae are important breeding areas. An important breeding area for bird dependend on meadows are the humid grasslands (Molinetum) and the transition mires (Rhynchosporietum albae, Caricetum lasiocarpae). At the Old Rhine one can find a riverine forest (Pruno fraxinetum).

15. Land tenure /ownership of:

(a) site

private property, water area largely Republik of Austria

(b) surrounding area

private property

16. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made; management practices; whether an officially approved management plan exists and whether it has been implemented)

Existing nature reserve decree. Management plan

17. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

Development plan in preparation

18. Current land use: principal human activities in:

(a) site

Nature protection, extensive and intensive agrivultural use, forestry and arboretum, fishing, tourism, hunting

(b) surroundings/catchment

Agricultural area, settlement area

19. Disturbances/threats, including changes in land use and major development projects:

(factors which may have a negative impact on the ecological character of the wetland)

(a) at the site

Partly drying up of water meadows. Heavy disturbance due to recreation activities, boating, hunting, fishing

(b) in the surroundings/catchment

Transformation of natural areas into agricultural areas

20. Hydrological and physical values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc.)

A large part of the nature site is protected from floods through a dam. The ground water level south of the dam is artificially regulated with the help of 3 pumps. Due to the fact that an draining system exists, there is a danger of the mire further drying up.

21. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

Small-scale forestry. Intensive and extensive agriculture. Tourism, Fishing are economic factors.

22. Noteworthy fauna: (e.g. unique, rare, endangered, abundant or biogeographically important species; include count data etc.)

Occurrence of more than 10000 waterbirds and 1000 waders. *Fulica atra* (10000), *Anas clypeata* (200), *Aythya fuligula* (5000), *Aythya ferina* (2500). Important roost during winter migration for: *Podiceps cristatus* (1000), *Mergus merganser* (500), *Cygnus cygnus*, *Anas strepera* (700 in autumn), *Anas acuta*, *Netta rufina* (100; in autumn max. >2000), *Aythya marila*, *Somateria mollissima*, *Melanitta fusca*. Wintering and roosting area for *Numenius arquata*, max. 1200). Near the whole alpine population of *Mergus merganser* (max. >1000) moults in the site. Breeding species: *Crex crex* (1-2 pairs), *Gallinago gallinago* (35-50 p.), *Limosa limosa* (12-15 p.), *Sterna hirunda* (50-150 p.), *Numenius arquata* (10-12 p.)

23. Noteworthy flora: (e.g. unique, rare, endangered, or biogeographically important species/communities etc.)

The only place in Austria where *Hydrocotyle vulgaris* exists. Endangered in Europa: *Thypa minima*, *Gladiolus palustris*, *Liparis loeselii*, *Sprianthes aestivalis* etc.

24. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

Regular documentation of breeding and roosting birds. Presently, studies are carried out on dragon-fly and butterflies. Research project on the effects of draining systems on the vegetation and soil fauna of humid grasslands.

25. Current conservation education: (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

None. Preparations in process.

26. Current recreation and tourism: (state if wetland used for recreation/tourism; indicate type & frequency/intensity)

Pls see items 18 and 21. Tourism not organized. Mainly recreation activities, little nature tourism. No information possibilities.

27. Management authority: (name and address of body responsible for managing the wetland)

Amt der Vorarlberger Landesregierung
Abt. IVe, Landhaus, A-6901 Bregenz
Tel.: 05574 - 511 Fax.: 05574 - 51180

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept of Environment etc.)

Amt der Vorarlberger Landesregierung
Abt. IVe, Landhaus, A-6901 Bregenz
Tel.: 05574 - 511 Fax.: 05574 - 51180

29. Bibliographical references: (scientific/technical only)

Grabher,M.; Blum,V. (1990): Naturschutzgebiet Rheindelta.-Ramsarbericht 1, Bestandsaufnahme österreichischer Schutzgebiete, Teil A: 1-58. Umweltbundesamt, wien.

30. Reasons for inclusion: (state which Ramsar criteria - as adopted by Rec.C.4.15 of the Montreux Conference - are applicable)

1d, 2a, 3a

31. Map of site (please enclose the most detailed and up-to-date map available - preferably at least 1:25,000 or 1:50,000)
ÖK numbers: 110 and 111 (M 1:50000)

Please return to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England
Telephone: 44 - (0)453 890634 Telefax: 44 - (0)453 890827 Telex: 43 71 45 WWF-G

Information Sheet on Ramsar Wetlands

As approved by Rec.C.4.7 of the Conference of the Contracting Parties, Montreux, Switzerland - July 1990

NOTE: Please read the accompanying guidelines before attempting to complete this form. An example of a completed data sheet is also included.

Completed sheets should be returned to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

1. Country: AUSTRIA

2. Date: 7.1.1992

3. Ref: office use only

4. Name and address of compiler:

Dr. Reinhold Turk

Amt der steiermärkischen Landesregierung, Rechtsabteilung 6, Fachstelle Naturschutz,
Karmeliterplatz 2; A-8010 Graz
Tel.: 0316-877/3707; Fax.: 0316-877/4314

5. Name of wetland:

PÜRGSCHACHEN MOOR

6. Date of Ramsar designation: 9. September 1991

7. Geographical coordinates: 47°35'N 14°21'E

8. General location: (e.g. administrative region and nearest large town)

Province of Styria, District of Liezen, approx. 7.5 km east of the town of Liezen.

9. Area: (in hectares)

62 ha

10. Wetland type: (see attached classification, also approved by Montreux Rec.C.4.7)

. U

11. Altitude: (average and/or maximum & minimum)

The entire area lies at an altitude of approx. 632 m above sea level

12. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

Raised peat bog surrounded by developing flat bogland, damp meadows, patches of conifers. Situated in the flood plain of the river Enns. It serves as a good example of the once extensive ancient peatlands of the inneralpine valleys. The central raised peat bog area (46 ha) is currently managed by WWF-Austria.

13. Physical features: (e.g. geology; geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth; water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

During the past 10000 years the Pürgschachen Moor developed out of a postglacial lake. Through a slow process of sedimentation layers of peat were laid down to reach a current average depth of 6 m. Pollen analysis reveals that the early vegetation was dominated by sedges and rushes. The older, deeper layers of peat show remnants of Myrica gale, now extinct in Austria. The upper layers show a dominance of Sphagnum moss. The central raised peat bog area is surrounded by flatter bogland and damp meadows interspersed with areas of conifer woodland. The peripheral areas are influenced by human interference such as drainage ditches, attempts of afforestation and peat extraction.

14. Ecological features: (main habitats and vegetation types)

Raised peat bog area: Contains patches of Pinus mugo and areas free of trees and shrubs. Plant communities determined by acidity. Main species are Pinus mugo, Sphagnum magellanicum, Sphagnum fuscum, Sphagnum tenellum, Sphagnum warnstorffii, Sphagnum cuspidatum, Eriophorum vaginatum, Vaccinium oxycoccos, Drosera rotundifolia, Calluna vulgaris, Andromeda polifolia. Area between raised peat bog and peripheral woodland: This area is developing into a raised peat bog and shows the highest species diversity: Main species are: Betula pubescens, Pinus sylvestris, Pinus mugo, Calluna vulgaris, Andromeda polifolia, Sphagnum magellanicum, Sphagnum rubellum, Sphagnum tenellum, Sphagnum warnstorffii. The drainage ditch surrounding the bog harbours a completely different species community. Main species are: Eriophorum vaginatum, Rhynchospora alba, Carex rostrata, Molinia caerulea, Sphagnum cuspidatum, Sphagnum acutifolium, Sphagnum palustre, Sphagnum squarrosum. At the edge of the ditch there are: Rhamnus frangula, Betula pubescens, Picea abies, Pinus sylvestris,

15. Land tenure /ownership of:

(a) site The entire site is currently under private ownership (several owners). The central area (raised peat bog, 40 ha) is leased to WWF-Austria until 1996.

(b) surrounding area Private ownership.

16. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made; management practices; whether an officially approved management plan exists and whether it has been implemented)

The site lies in a protected landscape area. This, however, does not offer sufficient legal protection in order to maintain and secure its ecological character.

17. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

The conservation authorities together with NGO's are in the process of purchasing the whole site and preparing the necessary steps to achieve full legal protection. An management plan will be drawn up the near future aiming at reversing the current drainage and afforestation situation.

18. Current land use: principal human activities in:

(a) site

The central areas are currently not used. Some peripheral areas are used as hay meadows.

(b) surroundings/catchment The immediate surroundings are used as hay meadows.

19. Disturbances/threats, including changes in land use and major development projects:

(factors which may have a negative impact on the ecological character of the wetland)

(a) at the site

The main potential threat to the site are the current drainage activities. However, these will not be allowed to continue once the site is under full legal protection. A future management plan will include the filling in of existing ditches.

(b) in the surroundings/catchment None known.

20. Hydrological and physical values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc.)

The site receives its water supply from 3 different sources:

- a) Where the river Enns draws close to the site, the peripheral areas are regularly flooded.
- b) The central area is fed by ground water.
- c) High precipitation and a damp climate provide a regular atmospheric water supply.

21. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

Important for conservation, education and scientific research, particularly pollen analysis.

22. Noteworthy fauna: (e.g. unique, rare, endangered, abundant or biogeographically important species; include count data etc.)

The site harbours a range of rare, specialised and relic species of invertebrates and is particularly important for Lepidoptera, Hymenoptera, Diptera, Salticidae and Pseudoscorpions.

23. Noteworthy flora: (e.g. unique, rare, endangered, or biogeographically important species/communities etc.)

Rare and endangered as well as biogeographically important species include *Betula nana*, *Pinus mugo*, *Vaccinium oxycoccus*, *Vaccinium uliginosum*, *Drosera anglica*, *Drosera rotundifolia*, *Eriophorum vaginatum*, *Andromeda polifolia*, *Molinia caerulea*, *Scheuchzeria palustris*, *Drepanocladus fluidans*, *Polytrichum strictum*.

Cladonia stygia is at the southern edge of its European distribution.

Pürgschachen Moor

24. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

None

25. Current conservation education: (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

None

26. Current recreation and tourism: (state if wetland used for recreation/tourism; indicate type & frequency/intensity)

None

27. Management authority: (name and address of body responsible for managing the wetland)

Amt der Steiermärkischen Landesregierung, Rechtsabteilung 6,
Karmeliterplatz 2; A-8010 Graz

Note: WWF-Austria is currently managing the central raised peat-bog area. A full management plan will be established after the acquisition of the whole site.

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept of Environment etc.)

Amt der Steiermärkischen Landesregierung, Rechtsabteilung 6,
Fachstelle Naturschutz

29. Bibliographical references: (scientific/technical only)

BIRKER, R. (1979): Zur Ökologie und Torfstratigraphie des Pürgschachen-Moores.

Diss.-Karl-Franzens-Univ. Graz.

FRANZ, H. und KLIMESCH, J. (1947): Das Pürgschachenmoor im Steirischen Ennstal. Natur und Land 34, 5/6, 128-136.

KRAL, F. und MAYER, H. (1979): Aus dem Pollenarchiv des WWF-Reservates Pürgschachener Moor. Allgemeine Forstzeitung 2.

RUOSS, E.; MAYRHOFER, H. und PONGRATZ, W. (1987): Eine Rentier- und eine Becherflechte neu für die Steiermark. Mitt. naturwissenschaftlicher Verein Steiermark 147, 105-110.

30. Reasons for inclusion: (state which Ramsar criteria - as adopted by Rec.C.4.15 of the Montreux Conference - are applicable)

1a, 2a, 2b

31. Map of site (please enclose the most detailed and up-to-date map available - preferably at least 1:25,000 or 1:50,000)

Ök 99

Please return to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

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Telefax: 44 - (0)453 890827

Telex: 43 71 45 WWF-G

Information Sheet on Ramsar Wetlands

As approved by Rec.C.4.7 of the Conference of the Contracting Parties, Montreux, Switzerland - July 1990

NOTE: Please read the accompanying guidelines before attempting to complete this form. An example of a completed data sheet is also included.

Completed sheets should be returned to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

1. Country: Austria

2. Date: November 1992 **3. Ref:** office use only

4. Name and address of compiler:

Dr. Thusnelda Rottenburg
Amt der Kärntner Landesregierung, Abt. 20, Landesplanung
Arnulfplatz 1; A-9021 Klagenfurt;
Tel.: 0463-536/32003; Fax.: 0463-536/32007

5. Name of wetland: SABLATNIGMOOR BEI EBERNDORF

6. Date of Ramsar designation: 5.5.1992

7. Geographical coordinates: 14°36'E, 46°34'30''N

8. General location: (e.g. administrative region and nearest large town)

Province of Carinthia, approx. 25 km SE of the capital Klagenfurt

9. Area: (in hectares)

approx. 100ha

10. Wetland type: (see attached classification, also approved by Montreux Rec.C.4.7)

U (fen)

11. Altitude: (average and/or maximum & minimum)

480m

12. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

Complex of terrestrialisation and allutivation fen, spring fens and percolating mire.

13. Physical features: (e.g. geology; geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth; water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

Terrestrialisation developed out of a small glacial basin on a ground moraine. Later on dammed up and used as fishpond. This artificial dam is still being kept, fishing has been stopped in the meantime. An open water is constantly maintained, small fluctuations in the water level due to the function of the fen as retention area.

Climate: pls. see Annex 1

14. Ecological features: (main habitats and vegetation types)

Various societies of water plants, reedbeds and large sedge communities, tall herb communities, small sedge communities, humid grasslands, small rush communities, alder swamp-woods. In the marginal area broad leaved deciduous forests.

15. Land tenure /ownership of:

(a) site

The complete nature reserve belongs to Eberndorf.

(b) surrounding area Private property, part of Eberndorf

16. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made; management practices; whether an officially approved management plan exists and whether it has been implemented)

Nature reserve based on the Carinthian Law on Nature Protection, Decree LGB1. 102/1979. Care of the humid grassland (removal of wood). Building of a fish lifting aid at the outlet.

17. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

It is envisaged to prepare a general plan for cultivation ("Pflegeplan").

18. Current land use: principal human activities in:

(a) site

Agriculture. Fishing has been terminated.

(b) surroundings/catchment

Agriculture, forestry

19. Disturbances/threats, including changes in land use and major development projects:

(factors which may have a negative impact on the ecological character of the wetland)

(a) at the site

none

(b) in the surroundings/catchment

Golf court.

Danger of chemicals entering the protected area. Protection measures are planned.

20. Hydrological and physical values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc.)

The whole area is being artificially dammed up (for more than 100 years) and serves as retention basin during the floods in spring.

21. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

From the cultural point of view fishfarming in ponds formally practised in this area is of some importance; an old ditch system, which is no longer used, reminds visitors of the old practice. There is also a house from this period left, which shall be restored and made accessible to visitors.

22. Noteworthy fauna: (e.g. unique, rare, endangered, abundant or biogeographically important species; include count data etc.)

Breeding Birds:

Podiceps cristatus, Podiceps ruficollis, Anas platyrhynchos, Anas crecca, Vanellus vanellus, Fulica atra, Gallinula chloropus, Ixobrychus minutus, Motacilla flava, Saxicola rubetra, Saxicola torquata, Emberiza schoeniculus, Locustella luscinoides, Acrocephalus paulustris

Migrants:

Gavia arctica, Podiceps auritus, Phalacrocorax carbo, Ardea purpurea, Egretta garzetta, Nycticorax nycticorax, Platalea leucorodia, Anas acuta, Anas querquedula, Pandion haliaetus, Circus aeruginosus, Gallinago gallinago, Scolopax rusticola, Limosa limosa, Tringa erythropus, Tringa nebularia, Tringa ochropus, Tringa glareola, Philomachus pugnax, Chlidonias niger, Alcedo atthis

23. Noteworthy flora: (e.g. unique, rare, endangered, or biogeographically important species/communities etc.)

The flora shows some very rare and interesting plants:

Drosera anglica, Drosera rotundifolia, Utricularia minor, Utricularia intermedia, Liparis loeselii, Thelypteris palustris, Eriophorum div. sp., Trichophorum alpinum, Potentilla palustris, Carex pseudocyperus, Epipactis palustris, Gentiana pneumonanthe, Carex bohemica etc.

24. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

Birds and small animals are observed, fish population is being studied.

25. Current conservation education: (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

Concrete plans are underway, realization at an early stage.

26. Current recreation and tourism: (state if wetland used for recreation/tourism; indicate type & frequency/intensity)

Not much yet.

27. Management authority: (name and address of body responsible for managing the wetland)

Pls. see item 4 (Amt der Kärntner Landesregierung, Abt. Landesplanung)

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept of Environment etc.)

- a) Amt der Kärntner Landesregierung, Abt. 2Ro(Legal matters concerning nature protection)
- b) Amt der Kärntner Landesregierung, Abt. Landesplanung

29. Bibliographical references: (scientific/technical only)

It is intended to publish a monograph about the area (proposed date of issue: 1993)

30. Reasons for inclusion: (state which Ramsar criteria - as adopted by Rec.C.4.15 of the Montreux Conference - are applicable)

1a, 2a, 2b, 2c

31. Map of site (please enclose the most detailed and up-to-date map available - preferably at least 1:25,000 or 1:50,000)
Ök number 204

Please return to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

Telephone: 44 - (0)453 890634

Telefax: 44 - (0)453 890827

Telex: 43 71 45 WWF-G

6. 1993 - Das Jahr der Feuchtgebiete

Von Seiten des Umweltbundesamtes werden 1993 ausgewählte Projekte zum Schutz der Feuchtgebiete erarbeitet. Abgesehen von den Grundlagenerhebungen in einigen Ramsar-Gebieten (vgl. Kap. 3.1.) stehen derzeit die Berichte "Bestandserhebung der Feuchtwiesen im pannonicischen Raum", "Weißstorch in Österreich" und die "Wasservogelbrutgebiete Österreichs" in Bearbeitung.

Die Aktivitäten in Österreich zum Schutz der Feuchtgebiete stellen 1993 einen wesentlichen Themenschwerpunkt im Naturschutz dar. Um die in Österreich nunmehr seit 10 Jahren bestehenden Vereinbarungen des Ramsar-Übereinkommens einer breiten Öffentlichkeit näher zu bringen, hat Frau Bundesministerin Maria Rauch-Kallat das Jahr 1993 zum Jahr der Feuchtgebiete erklärt.

Unter der Mithilfe zahlreicher Organisationen werden Beiträge zum Jahr der Feuchtgebiete erstellt und verschiedene Aktionen durchgeführt. Durch verstärkte Öffentlichkeitsarbeit soll dieses wichtige Naturschutzthema der breiten Öffentlichkeit nahegebracht werden.

7. Literatur

FARASIN, K. (1991)

Ramsar. Monitoring Procedure Donau-March-Thaya-Auen. 15.-17. April. Grundlagen. Interner Bericht. Umweltbundesamt. Wien.

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Anhang 1

Klimadaten Sablatnig Moor



Gemeinde: Eberndorf (477 m)

Jahresgang von Temperatur und Niederschlag:

	Monatsmittel °C	Monatssumme mm
Jänner	- 5,8	42
Februar	- 1,9	42
März	2,8	59
April	8,4	79
Mai	12,9	101
Juni	16,4	120
Juli	17,6	155
August	16,6	134
September	14,1	97
Oktober	8,5	79
November	3,0	122
Dezember	- 4,2	66
Jahr	7,4	1096

Mittlere monatliche Temperaturextreme:

	Maximum °C	Minimum °C
Jänner	6,1	-18,9
Februar	10,3	-14,1
März	16,5	- 9,8
April	23,5	- 3,0
Mai	26,7	0,8
Juni	30,3	4,1
Juli	31,3	6,1
August	30,1	5,8
September	26,5	3,1
Oktober	22,3	- 1,8
November	15,9	- 7,1
Dezember	6,0	-16,5

Zahl der Frosttage (Temp.-Minimum unter 0°): 130

Zahl der Sommertage (Temp.-Maximum mindestens 25°): 43

Zahl der Tage mit Nebel (Horizontalsicht zeitweise kleiner als 1 km): 102

Zahl der Tage mit Niederschlag (mindestens 0,1 l/m²): 143

Zahl der Tage mit Gewitter: 28

Zahl der Tage mit Schneefall oder Schneeregen: 34

Zahl der Tage mit Schneebedeckung: 98

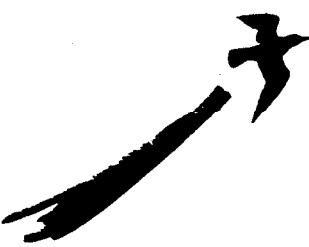
Größte Schneehöhe im Durchschnitt: 50 cm



Anhang 2

Information Sheet on Ramsar Wetlands





RAMSAR DATABASE

INFORMATION SHEET ON RAMSAR WETLANDS

Explanatory Note and Guidelines

An Information Sheet should be completed for each Ramsar wetland. A specimen of the basic data sheet is appended. In some cases, insufficient information may be available for entries to be made under all sections of the data sheet. However, compilers are urged to fill out as many sections as possible, and in any event to make some entry under sections 1, 2, 4, 5, 7, 8, 9, 10, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22 and 23. In the case of a wetland which has been well studied and well documented, or which is the subject of special field investigations, far more information may be available than can be accommodated on the data sheet. If this is so, additional information can be provided by attaching additional pages. Whenever possible, copies of published papers or photocopied reports on the site should be appended to the data sheet. Slides or photographs of the wetland are also especially valuable.

In the case of very large and complex wetland systems, two levels of approach may be advisable: a broad approach for the system as a whole, and a more detailed approach for key localities within the system. Thus for a particularly large wetland complex it may be appropriate to complete an Information-Sheet for the site as a whole and a series of sheets for key areas within the complex.

The following notes relate to the various sections on the Information Sheet:

1. Country: The name of the country
2. Date: The date on which the data sheet was completed
3. Ref: A reference number for the site (to be allocated by the Ramsar Database manager).
4. Name and address of compiler: The full name and address of the person compiling the Information sheet, together with telephone, fax and telex numbers.
5. Name of wetland: The name of the designated site (alternative names should be given in brackets)
6. Date of Ramsar designation: The date on which the wetland was officially designated for the List of Wetlands of International Importance.
7. Geographical coordinates: The geographical coordinates (latitude and longitude; Greenwich) of the approximate centre of the wetland, expressed in degrees and minutes. If the site consists of two or more discrete entities, the coordinates of the centres of each of these entities should be given.

8. General Location: A description of the general location of the wetland including the distance (in a straight line) and compass bearing of the wetland from the nearest significant town or city.
9. Area: The area of the designated site in hectares.
10. Wetland Type: List all the wetland habitats present in the site, using the classification attached as Annex I (approved by Montreux Rec. C.4.7). It is only necessary to list the relevant codes. Please indicate which wetland type is dominant by placing a circle around the relevant code in your list. It is recognised that this may be difficult for large sites with a variety of habitats, but this general indication is invaluable to the database manager and Ramsar Bureau staff.
11. Altitude: The minimum, average, maximum and elevation of the wetland in metres above mean sea level.
12. Overview: A brief summary of the wetland in not more than two or three sentences, mentioning principal physical and ecological features.
13. Physical features: A short description of the principal physical characteristics of the site, covering the following points where relevant:
 - geology and geomorphology
 - origins (natural or artificial)
 - hydrology (including seasonal water balance, inflow and outflow)
 - soil type and chemistry
 - water quality (physico-chemical characteristics)
 - depth, fluctuations and permanence
 - tidal variations
 - catchment area
 - downstream area (especially in the case of wetlands important in flood control)
 - climateInformation on climate need only include the most significant climatic features (e.g. annual rainfall and average temperature range) and any other factors having a major effect on the wetland.
14. Ecological features: A brief description of the main habitats and vegetation types present, listing the dominant plant communities and species present, and describing any zonation, seasonal variations and long-term changes. Include a brief note on the original natural plant communities in adjacent areas, as well as the present plant communities (including cultivation) if different from the original vegetation.
15. Land tenure/ownership: Details of ownership of the wetland and ownership of surrounding areas (e.g. state, provincial, private etc). Give explanatory details for terms having a special meaning in the country or region concerned.

16. Conservation measures taken: Details of any protected areas established at or around the wetland, and any other conservation measures taken at the site, such as restrictions on development, management practices beneficial to wildlife, closures of hunting etc. If a reserve has been established, please give the date of establishment and size of the protected area. State whether an officially approved management plan exists and whether it has been implemented. If only a part of the wetland is included within a protected area, the area of wetland habitat which is protected should be noted. An assessment of the enforcement of legislation and effectiveness of any protected areas should be given whenever possible.
17. Conservation measures proposed but not yet implemented: Details of any conservation measures which have been proposed for the site, including any proposals for legislation, protection and management. Summarize the history of any long-standing proposals which have not yet been implemented, and make a clear distinction between those proposals which have already been officially submitted to the appropriate government authorities, and those proposals which have not as yet received official government endorsement, e.g. recommendations in published reports and resolutions from specialist meetings. Also mention any management plan which exists (or is in preparation) but has not yet been implemented.
18. Current land use: principal human activities in (a) the Ramsar site itself and (b) in the surroundings and catchment. Give information on the human population in the area, with a description of the principal human activities and main forms of land use at the wetland, e.g. water supply for domestic and industrial use, irrigation, agriculture, livestock grazing, forestry, fishing, aquaculture and hunting. Some indication of the relative importance of each form of land use should be given whenever possible. In section (b) summarize land use in the catchment which might have a direct bearing on the wetland, and land use in any downstream areas likely to be affected by the wetland.
19. Disturbances and threats including changes in land use and major development projects: Information on any human activities at the site or in the catchment area which have had, are having, or may have a detrimental effect on the natural ecological character of the wetland (e.g. diversion of water supplies, siltation, drainage, reclamation, pollution, over-grazing, excessive human disturbance, and excessive hunting and fishing). Distinguish if possible between internal and external threats. List introduced exotic species and give information on why they were introduced
20. Hydrological and biophysical values: A brief description of the principal hydrological and biophysical values of the wetland, e.g. its role in the recharge and discharge of groundwater, flood control, sediment trapping, prevention of coastal erosion, maintenance of water quality and support of food chains.

21. Social and cultural values: A brief account (more detail can be given in sections 24-26 below) of the principal social values (e.g. tourism, outdoor recreation, education and scientific research, grazing, water supply, fisheries production) and cultural values (e.g. historical associations and religious significance). Whenever possible, indicate which of these values are consistent with the maintenance of natural wetland processes and ecological character, and which values are derived from non-sustainable exploitation or detrimental ecological changes.
22. Noteworthy fauna: A general account of the noteworthy fauna of the wetland, with details of population sizes whenever possible. Particular emphasis should be given to threatened species, economically important species and species occurring in internationally significant numbers. Lists of species and census data should not be quoted in full on this form, but copies should be appended to the information sheet whenever possible.
23. Noteworthy flora: Information on any plant species or communities for which the wetland is particularly important (e.g. endemic species, threatened species or particularly good examples of native plant communities).
24. Current scientific research and facilities: Details of any current scientific research and information on any special facilities for research.
25. Current conservation education: Details of any existing programmes and facilities for conservation education and training and comments on the educational potential of the wetland.
26. Current recreation and tourism: Details of the present use of the wetland for recreation and tourism, with details of existing or planned facilities.
27. Management authority: The name and address of the body responsible for the conservation and management of the wetland.
28. Jurisdiction: The name of the government authority with territorial jurisdiction over the wetland, e.g. state, region or municipality, and the name of the authority with functional jurisdiction for conservation purposes, e.g. Department of Environment, Department of Fisheries.
29. References: A list of key references relevant to the wetland, including management plans, major scientific reports and bibliographies. When a large body of published material is available on the site, only the most important references need be cited, with priority being given to recent literature containing extensive bibliographies. Reprints or copies of the most important literature should be appended whenever possible.
30. Reasons for inclusion: State which of the Ramsar Criteria for identifying features of international importance, as adopted by the Conference of the Parties to the Convention in Montreux in July 1990, are applicable (e.g. 1(a); 2(b); 2(c) etc. The criteria are attached as Annex II.

31. Outline map of site: Append an outline map of the wetland. Whenever possible, maps should include geographical coordinates, a compass bearing, scale, date, administrative boundaries, the boundary of the Ramsar site, some topographical information, notable hydrological features, the distribution of the main wetland habitat types, main roads and other notable features. The map should be as detailed and up-to-date as possible; 1:25,000 or 1:50,000 should be regarded as the minimum acceptable scale for most sites.

Completed information sheets should be returned to T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucestershire GL2 7BX, England.
Tel: 44 (0)453 890634 Fax: 44 (0)453 890697 Telex: 437145 IWRB G

ANNEX I

WETLAND TYPE

Please list all the wetland types present within the designated Ramsar boundaries according to the codes listed below. Please remember to indicate which wetland type is dominant by placing a circle around up the relevant code when you enter wetland types on the datasheet.

The codes are based upon the 'Classification Wetland Type' approved by Rec. C.4.7 of the Conference of the Contracting Parties (Montreux, 1990). The categories listed are intended to provide only a very broad framework to aid rapid identification of the main wetland habitats represented at each site. This framework should not be considered as an attempt at a comprehensive wetland classification.

Natural and Semi-natural Wetland Habitats

Shallow marine waters.....	A
Marine beds.....	B
Coral reefs.....	C
Rocky shores.....	D
Sand/shingle shores (including dune systems).....	E
Estuarine waters.....	F
Tidal mudflats (including intertidal flats and saltflats).....	G
Salt marshes.....	H
Mangrove/tidal forest.....	I
Coastal brackish/saline lagoons.....	J
Coastal fresh lagoons.....	K
Deltas.....	L

Rivers/streams/creeks: permanent.....	M
seasonal/intermittent.....	N
Freshwater lakes: permanent.....	O
seasonal/intermittent.....	P
Saline/brackish lakes/marshes: permanent.....	Q
seasonal/intermittent.....	R**
Freshwater marshes/pools: permanent.....	S
seasonal intermittent.....	T**
Peatlands (including peat bogs, swamps, fens).....	U
Tundra/Alpine wetlands.....	V
Shrub-dominated wetlands.....	W
Tree-dominated wetlands (including swamp forest).....	X**
Freshwater springs (including oases).....	Y
Geothermal wetlands.....	Z

** to include floodplain wetlands such as seasonally inundated grassland or forest

Man-made Wetland Habitats

Fish/shrimp ponds.....	1
Farm ponds, small tanks.....	2
Irrigated land, (including rice fields).....	3
Seasonally flooded agricultural land.....	4
Salt pans, salines.....	5
Reservoirs/barrages/dams.....	6
Gravel/brick/clay pits.....	7
Sewage farms.....	8
Canals.....	9
No information.....	0

ANNEX II

REC. C.4.2 (Rev.) Annex I from: Montreux Proceedings, Vol. 1

CRITERIA FOR IDENTIFYING WETLANDS OF INTERNATIONAL IMPORTANCE

Introduction

Article 2.1 of the Convention states that "Each Contracting Party shall designate suitable wetlands within its territory for inclusion in a "List of Wetlands of International Importance". The guidance provided by the Convention text on identification of "wetlands of international importance" is in Article 2.2, which refers to "international significance in terms of ecology, botany, zoology, limnology or hydrology" and indicates that "In the first instance, wetlands of international importance to waterfowl at any season should be included". The Criteria set out below, which have been approved by the Conference of the Contracting Parties, are for identifying wetlands of international importance.

Criteria

A wetland is identified as being of international importance if it meets at least one of the criteria set out below:

1. Criteria for representative or unique wetlands

A wetland should be considered internationally important if:

(a) it is a particularly good representative example of a natural or near-natural wetland, characteristic of the appropriate biogeographical region;

or (b) it is a particularly good representative example of a natural or near-natural wetland, common to more than one biogeographical region;

or (c) it is a particularly good representative example of a wetland which plays a substantial hydrological, biological or ecological role in the natural functioning of a major river basin or coastal system, especially where it is located in a trans-border position;

or (d) it is an example of a specific type of wetland, rare or unusual in the appropriate biogeographical region.

2. General criteria based on plants or animals

A wetland should be considered internationally important if:

(a) it supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plant or animal, or an appreciable number of individuals of any one or more of these species;

or (b) it is of special value for maintaining the genetic and ecological diversity of a region because of the quality and peculiarities of its flora and fauna;

or (c) it is of special value as the habitat of plants or animals at a critical stage of their biological cycle;

or (d) it is of special value for one or more endemic plant or animal species or communities.

3. Specific Criteria Based on Waterfowl

A wetland should be considered internationally important if:

(a) it regularly supports 20,000 waterfowl;

or (b) it regularly supports substantial numbers of individuals from particular groups of waterfowl, indicative of wetland values, productivity or diversity;

or (c) where data on populations are available, it regularly supports 1 % of the individuals in a population of one species or subspecies of waterfowl..

Guidelines for Application of the Criteria

To assist Contracting Parties in assessing the suitability of wetlands for inclusion on the List of Wetlands of International Importance, the Conference of the Contracting Parties has formulated the following guidelines for application of the Criteria:

(a) A wetland could be considered of international importance under Criterion 1 if, because of its outstanding role in natural, biological, ecological or hydrological systems, it is of substantial value in supporting human communities dependent on the wetland. In this context, such support would include:

- provision of food, fibre or fuel;
- or maintenance of cultural values;
- or support of food chains, water quality, flood control or climatic stability. The support, in all its aspects, should remain within the framework of sustainable use and habitat conservation, and should not change the ecological character of the wetland.

or (b) A wetland could be considered of international importance under Criterion 1, 2 or 3 if it conforms to additional guidelines developed at regional (e.g. Scandinavian or West African) or national level. Elaboration of such regional or national guidelines may be especially appropriate:

- where particular groups of animals (other than waterfowl) or plants are considered more suitable as a basis for evaluation;
- or where waterfowl and other animals do not occur in large concentrations (particularly in northern latitudes);
- or where collection of data is difficult (particularly in very large countries).

or (c) The "particular groups of waterfowl, indicative of wetland values, productivity or diversity" in Criterion 3 (b) include any of the following:

- loons or divers: Gaviidae;
- grebes: Podicipedidae;
- cormorants: Phalacrocoracidae
- pelicans: Pelicanidae
- herons, bitterns, storks, ibises and spoonbills: Ciconiiformes;
- swans, geese and ducks (wildfowl): Anatidae;
- wetland related raptors: Accipitriformes and Falconiformes
- cranes: Gruidae
- shorebirds or waders: Charadrii; and
- terns: Sternidae.

or (d) The specific criteria based on waterfowl numbers will apply to wetlands of varying size in different Contracting Parties. While it is impossible to give precise guidance on the size of an area in which these numbers may occur, wetlands identified as being of international importance under Criterion 3 should form an ecological unit, and may thus be made up of one big area or a group of smaller wetlands. Consideration may also be given to turnover of waterfowl at migration periods, so that a cumulative total is reached, if such data are available.