Workshop report

Development of national lists for Turkey for habitats and species of the Habitats Directive

Theo van der Sluis, René Henkens, Prof. Bob Bunce - ALterra
Johan Thissen – VZZ
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1. Introduction

The Turkish Anatolian region is not yet covered in Annex I and II of the Habitats Directive or Annex I of the Birds Directive. This is unlike the Mediterranean and Black Sea biogeographical regions, which were covered by other EU-member states (like Greece and Bulgaria). The final workshop, as one part of the overall project, aimed at learning from experiences in the Netherlands and other EU Member States (study-tour) with regard to development of the National Lists of the Habitats Directive. The workshop in Turkey, discussed a plan that provides an overview of the necessary steps towards the development of a National List for Natura 2000 habitats and species. After the study tour (where expertise on how the Reference Lists for bio-geographical regions have been developed and how different Member States anticipated in their development of National Lists; approach, methodology, not only in the Netherlands), this final workshop aimed at the joint preparation of a methodology and a first draft set of guidelines for National List development in Turkey. This workshop focused on definition and discussion of criteria for the selection of species and habitats of the Birds and Habitats Directive, for the Black Sea, Mediterranean and Anatolian bio-geographical regions.

Overall project aim:

- Contribute to further strengthening of institutional and organisational capacities in Turkey with regard to the harmonization of Turkey’s legislation with N2000;
- Prepare a methodology and a first draft set of guidelines for National List development in Turkey, including how to define and discuss the criteria for selection of species and habitats of the Birds and Habitats Directive, for the Black Sea, Mediterranean and Anatolian bio-geographical regions.

Specific objectives of the workshop:

- Increasing the knowledge and understanding of the participants about the development of National N2000 Habitat Lists and Species Lists by the EU Member States.
- Developing a road map on developing N2000 national lists for Turkey.
2. Presentation and discussions on the Habitat list

2.1 Introduction

Prof. Bob Bunce presented the background information on habitat classification and how they evolved finally in the Natura2000 habitats. From Humboldt’s biomes of the world (1880), through Raunkiaer’s plant life forms (1904) to the first vegetation of Britain by Moss (1910). An important step was the plant sociology developed by Braun-Blanquet & Tuxen in the 1930’s.

After World war II nature reserves were progressively selected on habitats. In recent times Woodward constructed world biomes (1985). The CORINE biotopes classification initially published in 1986 and the palearctic & Annex I habitats followed. Moss & Davies (1998) also developed the EUNIS classification to cover non semi-natural habitats. The EUNIS information system of the EEA also provides a wide range of data on biodiversity. In the framework of the BIOHAB project, the EBONE classification was developed (Bunce 2008). The difference with the previous classifications which are not designed for field use as they use many terms which are not defined. EBONE is practical; it is a key to mapping habitats in the field. It is currently in use throughout Europe, and it has been tested in all European environmental zones. Although it is not a system to construct the list of habitats per se, it can be used for an inventory of existing habitats in the country.

The annex I habitat types are the basis for the selection of the Natura2000 series. In the EU-15 there were 198 habitats, EU-25 counted 218 types, and EU-27 228 types. It is essential to note that the Annex I habitats have therefore developed as a list and are not constructed as a classification.

The selection criteria for habitats are:
- Threatened habitats
- Representative habitats of biogeographic regions
- Unique species

The habitats are described for each country and for each biogeographical region. In the case of Turkey this is the Mediterranean, Black Sea and Anatolian region. The criteria are the same, for all countries. However, there are still some differences in interpretation of the criteria between countries. Countries may add other criteria, if necessary, to achieve a good selection of habitats. For the Netherlands, additional selection criteria were e.g.
- best 5 sites for each habitat/species is selected (qualitative/quantitative)
- best 10 sites for priority habitats/species
- broad habitats: subtypes (based upon vegetation national class)
  - best 3 sites for each subtype
  - best 5 sites for priority subtypes.

The number of sites and the area covered also differ widely between countries, e.g. in the UK the sites are all highly protected and cover about 7% of the country, however in Spain the protection is low and about 25% of the country is in the Natura 2000 series. The proposed list is based on scientific criteria. However, the agreement on the proposed national list, as well as the final reference lists, is reached in discussion with the EU (in this case the Topic Centre biodiversity) and at the biogeographical seminars.

2.2 The implementation process

The whole process can be a lengthy procedure, for example, the process for the atlantic region was as follows:
1992: Habitats Directive
1996: 27 sites HD (282,000 ha), only already protected sites
1998: 89 sites HD: sites larger than 250 ha
1999: Atlantic Seminar 1 (Ireland): insufficient (ETC)
    advise: * select sites smaller than 250 ha
    * some habitats/species: too little cover (20-60/80 %)
    * ecological variation / spatial distribution

NGO + Independent expert Alterra are involved in process
2003: 165 Natura 2000-sites proposed to EU: sufficient
2005: decentralisation (management plans, impact assessment, ...)
2007: report on Favourable Conservation Status
2010: formal assignment
1998-2005: National legislation adapted for species and site protection

The habitats descriptions are agreed upon by the Habitats Committee guided by the European Topic Centre. The names of habitats however are agreed upon by the Council of Ministers. These are separate processes, which may result in names of habitats which are not entirely consistent with the descriptions of habitats.

The broad types of habitats can be grouped as follows:
  o Plant community (e.g. habitat 2150, Calluno-Ulicetea)
  o Landscape units (e.g. habitat 1610, Baltic esker islands)
  o Soil types (e.g. habitat 6120, Xeric sand calcareous)
  o Plant species (e.g. habitat 9520, Abies pinsapo forest)
  o Geomorphological units (e.g. habitat 3180, Turloghs)

At the moment 40% of the habitat types of the EU are forest types, which descriptions can be modified. There exists a good source of information regarding the forests from the German Twinning project - *Interpretation Manual of European Union, Habitats in Turkey – Forests.*

The manual describes the forest habitat types occurring in Turkey and new proposed ones. This manual can be used as a basis to revise and update and since its production (2006) new members entered EU (Bulgaria and Romania).

As an example, we show some results of a study which is not further discussed. The map of Turkey falls in 9 different Environmental Zones according to the recently produced world map 9 zones are based on climate and altitude by the University of Edinburgh based on the methodology devised by Metzger et al (2005). The map confirms the diversity of Turkey in comparison with the number of Regions in other countries.

There is some discussion on the boundaries, whether these fit the local situation in all cases, but similar experiences are found in the European map because local variation maybe divided into more classes.
The question is: is the list enough to say what should be the list for Turkey?

Next step will also be to check which species of Annex II occur in these habitats.

The interpretation manual of the European Habitats is the bible, and the basis for all work! 

The descriptions vary in detail and experience is needed to interpret them consistently. However in the EBONE project a key has been produced to help in identifying the habitat of a particular location.
2.3 Process towards a habitats list

Advise 1. Define the habitats of the annex that are present

The basis of all work is formed by the Annex I of the Habitats Directive, and its interpretation manual. An important source to take into account is the Interpretation Manual of European habitats, free available on the internet, which describes in detail all habitat types with vegetations (http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm). The interpretation manual gives the information on whether a habitat may be present or not, what species are typical for the habitat type, as well as some geographical references (soil, landscape, altitude etc).

There is a Turkish list of habitats from 2006 which provides a good basis for the analysis of which habitats are present in Turkey. It is outdated though, since Romania and Bulgaria joined the EU since, and new habitats have been added to the Annex. There are some anomalies, such as Pinus mugo, which has to be decided by experts. The discussions we had were useful in covering the problems of identifying annex I habitats.

The Reference list of the Mediterranean region is a good base to check which habitats are likely to occur in Turkey. Habitats from the Western Mediterranean Basin like Portugal, may not be so likely to occur in Turkey as well. However, habitats that occur in Greece or Italy may also occur in Turkey. The tables with the habitats of the Mediterranean biogeographical region are available from the internet.

It was clear in the meeting that there was a great deal of experience in Turkey with the presence, distribution and composition of habitats. The book describing Key Biodiversity Areas provides a sound basis for describing the country. Based on all these sources a checklist can be made of the habitats from Annex I which are present in Turkey. It seemed that about 75% of the most recent Annex I lists are in Turkey, which represents the diversity of the country.

Advise 2. Consider unique species or associations which need protection

Are there specific (rare or threatened) vegetation associations which are not covered in the annex, which are considered important for conservation? The following criteria would apply:

- Rare, endemic, endangered habitats
- Containing many endemic plant and animal species (these species should not be added necessarily to the Annex II)
- Few broad habitats should be defined instead of many small ones

The new habitats should be defined based on expert knowledge. With relative small expert groups one can quickly and pragmatically assess which species or associations are unique or typical for Turkey. Based on a selection a broader consultation may be required.

Steppic habitats are very typical for Turkey. The question is whether these are real steppe or pseudo steppe, since the rainfall is too high (400-700 mm) whereas in real steppe it does not exceed 500 mm. But the vegetation is the final arbiter. However, there are some steppic grasslands included for the Pannonic region in the Interpretation Manual. The manual describes indicator species (e.g. Stipa grasses), as well as location and geography (gypsum soils), which gives an idea whether the habitat can be occurring in Turkey too. Compare the types in the manual with your habitat type! Unique species can be selected as ‘iconic’ species, or flagship species (e.g. Cedrus libani) but first it should be assessed whether the species is appropriate to propose. Quercus vulcanica and Liquidambar orientalis are other such important and iconic species from Turkey. It might be possible to justify the inclusion of these species as indicative of a forest type. However, overall, the EU experts in the meeting suggested to avoid focusing too much on individual species but rather to concentrate on the identification of vegetation types because currently almost 60 % of all habitat types in the EU are based on plant communities.
Advise 3. Assess whether potential Annex I habitats also occur in other EU member states
It should be avoided to propose new habitats based on one species, for which similar habitats occur in the EU-member states.
To use the example on Cedrus libanii, there already are Cedrus forests identified in Cyprus. Therefore it is possible that the Commission will suggest to adjust the current habitat type to ‘Cedrus forests’, so a modification of an existing habitat type. An alternative would be to construct a new habitat category.

For the Cedrus species the Interpretation manual gives the following description:

9590 *Cedrus brevifolia forests (Cedrosetum brevifolieae) PAL.CLASS.: 42.B2
1) Forests of Cedrus brevifolia, endemic to the western summits of the Troodos range
2) Plants Cedrus brevifolia, Quercus alnifolia, Arrhenatherum album, Cephalorrhynchus cypricus, Galium peplidifolium, Stellaria media, Lindbergella sintensii

Advise 4. Limit the number of habitats proposed for Annex I.
It’s generally recommended not to propose too many new habitats for Annex I.

The European Commission is very strict in the use of selection criteria. Newly proposed habitats will be discussed at the biogeographical seminar for each region: good communication and information is essential to organize the support!
The list of additions to Bulgaria and Romania shows that 9 forest types were added, as well as 2 grasslands and 2 scrub types - giving 13 in total.

There is already a list with suggestions from the German Twinning project, including the following:

<table>
<thead>
<tr>
<th>Habitat name</th>
<th>Habitat category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irano-Anatolian salt steppe (NATURA 2000-Code: 1350)</td>
<td>Coastal and halophytic habitats</td>
</tr>
<tr>
<td>Irano-Anatolian gypsaceous steppe (NATURA 2000-Code: 15xx)</td>
<td>Coastal and halophytic habitats</td>
</tr>
<tr>
<td>High mountain calcareous meltwater runnels (Toroslar)</td>
<td>Freshwater habitats</td>
</tr>
<tr>
<td>High mountain doline vegetation (Toroslar) (NATURA 2000-Code: 61A0)</td>
<td>Natural and semi-natural grassland formations</td>
</tr>
<tr>
<td>Irano-Anatolian steppe formations (NATURA 2000-Code: 62C0)</td>
<td>Natural and semi-natural grassland formations</td>
</tr>
<tr>
<td>Fagus orientalis forests (NATURA 2000-Code: 91xx)</td>
<td>Forests</td>
</tr>
<tr>
<td>Montane Abies forests of the Black Sea region (NATURA 2000-Code: 91xx)</td>
<td>Forests</td>
</tr>
<tr>
<td>Quercus vulcanica woods (NATURA 2000-Code: 92xx)</td>
<td>Forests</td>
</tr>
<tr>
<td>Wild Orchards (NATURA 2000-Code: 92xx)</td>
<td></td>
</tr>
<tr>
<td>Habitat category</td>
<td>Habitat name</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>Forests</td>
<td>Quercus aucheri woods</td>
</tr>
<tr>
<td>Forests</td>
<td>Abies cilicica forests</td>
</tr>
<tr>
<td>Forests</td>
<td>Cedrus libani forests</td>
</tr>
<tr>
<td>Forests</td>
<td>Quercus vulcanica woods</td>
</tr>
</tbody>
</table>

**Advise 5. Justify the proposed habitats for Annex I with data on distribution and relevance for species protection**

The data on distribution of habitat is probably limited for newly proposed habitats. Still it would be necessary to give an impression of the distribution of the habitat type. In the end it is necessary to identify most important sites which should be protected for this habitat type. Also habitats which are very important due to presence of endemics or a large number of fauna species which are otherwise not protected under the HD would justify its inclusion in the list, provided that this link is supported by evidence on distribution of those species.

**Advise 6. General advises and remarks**

Turkey is a large, diverse country; totally new landscapes compared to European Union and many endemic species. It may therefore qualify for a relatively larger number of new sites.

It is important to select the most important representative “habitat types” and to consider which ones are already covered by Natura 2000 Annex I (sometimes with a little revision)? Which ones are sufficiently important to be added as priority habitats?

The experts in the workshop checked the existing habitat types from Annex I (here the short descriptions were used from the EBONE key to the Annex I Habitats) and compared it with the Interpretation manual of the EU. For those habitats was checked whether they occur in the Mediterranean biogeographical region. Together with the experts an exercise was carried out to better visualize the level of information required to review the lists and to decide on which ones do occur in Turkey.

This resulted in a list of habitat types, for may or may not present in Turkey. This may present a gap in information, for which further research is required. In consultation with a larger group of experts could be shown whether it is data deficiency, or whether those habitats are absent in Turkey.
3. Summary Discussions on Species lists

3.1 Introduction

The process towards the approval of proposed species to Annex II of the Habitats Directive (designation of Natura2000 sites required) can generally be divided in five steps (figure 1).

1. The first step concerns a simple check whether the proposed species might already be on Annex II. If so this means that the species already exists in other EU-member states which have designated sites for it.

2. The second step concerns the selection of new endangered, vulnerable, rare or endemic species (see appendix 6 for a description of endangered…endemic). This second step actually concerns the justification why a species should be listed on Annex II of the Habitat Directive. This can be filled in at the application form from the European Topic Centre on Biodiversity (ETC-BD; appendix 6). If a species is already listed on Annex II, while it’s common in the accession country (like Turkey) concerned, it may request for a geographical exemption. This means a request not to list the species on Annex II for this country or region. A first selection in the number of proposed species will be made by the European Topic Centre (commissioned by the EU).

3. The third step concerns the agreement by all present 27 EU-member states on the species proposed for Annex II. Generally the 27 member states do not want to designate new sites as a result of a species proposed by an accession country.

4. The fourth step concerns informing the European commission on the presence of Annex II species per bio-geographic region.

5. The fifth step concerns the conformation of the proposed Annex II species at the next bio-geographical seminar.

Besides Annex II, species can also be listed on Annex IV (forbidden to persecute and disturb) and Annex V (hunting allowed, but under conditions).

The workshop focused on mammals and herpetofauna. A provisional national list was shown just to feed the discussions. The results of these discussions are reflected in the advises below.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
<th>Step 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check presence of current Annex II species in Turkey</td>
<td>Propose new species to European Commission, and ask for geographical exemptions</td>
<td>agreement by all Member States in Habitats Committee</td>
<td>Inform European Commission on the presence of Annex II species per biogeographic region</td>
<td>Reference list will be finalised at the start of biogeographical seminar</td>
</tr>
</tbody>
</table>

*Figure 1. Five steps towards the selection of species for annex II, Habitats Directive.*

3.2 Process towards a national list for Annex II species

The roadmap towards a national list for Annex II species requires a number of steps or activities. All needed to justify why a species should be under Annex II.
Advise 1. Agree on a good species list
A good scientifically proof species list should be agreed upon in order to draft the gross list of species for Turkey. See examples for mammals, reptiles and amphibians below.

Advise 2. Consider status of species on lists of Habitats Directive, IUCN Red List, Bern Convention (Annex II) and National Red List
The more a species is listed on the different threatened species lists available, the more chance that it will be approved for listing under Annex II.
- Habitats Directive: If species are already listed on Annex II of the Habitats Directive, there is no need to propose again;
- IUCN World Red List of Threatened Species: A higher status on the IUCN Red list helps to justify that a species needs to be listed on Annex II of the Habitat Directive;
- Bern Convention: If a species is listed on the Bern Convention especially Annex II of strictly protected species, it helps to justify that a species needs to be listed on Annex II of the Habitat Directive;
- Red List: A higher status on the National Red List helps to justify that a species needs to be listed on Annex II of the Habitat Directive.
- Besides these, there are also the Bonn Convention and CITES lists. The ranking on these lists as well is requested from the ETC-BD form.
National Red Lists are hardly available for Turkey. The information in the KBA-book (Key Biodiversity Areas) and the so-called German Twinning project may provide good species information.

Advise 3. Assess whether potential Annex II species are also distributed in other EU member states.

It should be assessed if a potential Annex II species is also distributed in other EU-member states. If so, the feasibility to get the proposed species through to Annex II Habitat Directive becomes very limited. Reason is that other member states, after finalisation of their countries sites designation process, would again need to designate sites for the additional species concerned. However, there can always be exceptions to this unwritten rule, for instance:

- The Fallow deer *Dama dama* for instance can be found in many EU-member states and the species has no threatened status at the lists of the IUCN, Bern Convention or Habitat Directive. Nevertheless it can still be proposed for Annex II as the Turkish population has been said to be the only natural population, while the other populations across Europe were introduced in ancient times. Through a geographical exemption it might still be possible to propose the natural population of Turkey, without troubling the other member states.

- The Chamois for instance can be found in many EU-countries and has no threatened status at IUCN, Bern Convention or Habitat Directive. However, Turkey has two subspecies named Asian Chamois *Rupicapra rupicapra asiatica* and the Caucasian Chamois *Rupicapra rupicapra caucasica*. The fact that these are subspecies not present in the other 27 EU-member, its proposal for Annex II would cause no problems with other member states.

- Several reptile species have been listed by Greece under the Annex IV Habitat Directive. Several Turkish experts which attended the workshop had the opinion that these species should be on Annex II as well. Proposal for Annex II however would cause problems with Greece, as Greece would have to designate new sites. The only way to overcome this problem seems if the species concerned can be found within Natura2000 sites that have already been designated in Greece for other species. In that case Greece would not have to designate new sites.

  The strategy is that Turkish scientists contact their Greek colleagues on this matter so they can assess the distribution of the species concerned within existing Natura2000 sites of Greece. If so, these Greek scientists should start lobbying for this species at the Greek Ministry responsible for Natura2000 designation. A difficult process though not impossible.

Advise 4. Limit the number of species proposed for Annex II.

It’s generally recommended not to propose too many species for Annex II. It has been said for instance that Romania proposed some 150 species while only some 20 got approved. The book on Key Biodiversity Areas in Turkey for instance suggests 10 voles and 5 shrew species for Annex II. All except 1 (Near Threatened) have the (lowest) Least Concern status on the IUCN Red List. Five are also present in other EU-member states. Their listing on Annex II would for instance as well cause a lot of paperwork for the Ministry regarding the periodic reporting to Brussels. Following strategy should be undertaken to make the proposal of species feasible.

- Some of the species are restricted to one or few Habitat types on Annex I of the Habitat Directive. Find out whether these habitat types are protected under Annex I. If so, assure that the sites designated for this habitat type also sufficiently cover the range of the species;
- Find out whether the species can be protected through the protection of Natura2000 sites that will be designated for other species;
- Contact the European Topic Centre in advance to check the feasibility of listing the proposed species on Annex II.

**Advise 5. Justify the proposed species for Annex II with data on distribution and population trends.**

The data on distribution and population trends is limited for many species which might qualify for listing on Annex II Habitat Directive. Additional inventory and monitoring data would definitely improve the justification for listing under Annex II.

**Advise 6. General advises and remarks**

Some general advises and remarks that were given during the workshop:

- Propose all ungulate species for Annex II (except Roe deer, Wild boar and Red deer - C. elaphus maral) as nearly all ungulate species populations are in decline. They generally need large areas for completion of their life cycle. Something which is seriously under pressure due to habitat destruction.
- What is stated above for the ungulates can also be said for the large and middle sized predators like Striped Hyena, Leopard, Jungle cat etc.
- The Anatolian region in Turkey is new to the EU. This probably allows for approval of a higher number of proposed species under Annex II.
- If a species already has a certain status at the Habitat Directive, its status remains after splitting in several species. For instance, the European pond turtle *Emys orbicularis* which is listed on Annex II has a subspecies in Turkey. This subspecies will automatically inherit the same status Annex II.
- Threatened species which use complexes of habitats (and which can not be covered by an Annex I habitat type) can be logical candidates for annex II and/or IV.
- Species which are threatened mainly by persecution and/or disturbance are candidates for Annex IV rather than Annex II.
4. Road map for the development of N2000 national lists

At the end of the workshop, recommendations were formulated with all participants for the development of the national lists for habitats and species. Based on the recommendations, the following steps are proposed, which can be seen as a road map towards the development of national lists.

Required steps

1. The responsible body for the development of national lists in Turkey is the Ministry of Environment and Forestry. It is recommendable that the Ministry of Environment and Forestry should therefore set itself targets for preparation of these lists and ensure budget available for the required activities (either from domestic funds or e.g. European funds).

2. It would be beneficial and time efficient to ensure the involvement of a wide group of specialists from Turkish Universities and NGOs to facilitate the process of developing national lists.

3. It is recommended that the Ministry of Environment and Forestry appoints a group or a team responsible to facilitate the process of data gathering and data analysis on habitats and the different species groups; this team needs to include specialists or experts from local Governments, Universities and NGOs as these mainly gather and analyse data about biodiversity in Turkey.

4. A central database must be set up to store all data on species and habitats relevant for nature conservation policy (i.e. through combining existing databases like Noah’s Ark and Tübitak Arbis database). This would include setting up the database, data input, management of the database, quality control and managing access to data. Necessarily part of this process has to be done by specialists from Universities or NGOs.

5. The cooperation of a group of experts (as inclusive as possible) should be ensured for data collection and analysis of distribution data and status of species. Experts should agree on complete lists for the species groups. From this group, a core-group should be established who will follow the N2000 process in Turkey and who will follow the process of the biogeographical seminars and data exchange. A close link should be established between this group and the Ministry of Environment and Forestry.

6. Data should be shared between universities and NGOs. The gaps of information about species and habitats need to be identified. Research should be carried out to collect additional information. Finally, using all the information, priority species and habitats should be listed on Turkey’s National List.

7. A communication and information process must be started for good exchange of information, to discuss the issues for different groups and habitats, to exchange information and align procedures.

8. Based on the research carried out, the Ministry of Environment and Forestry should communicate with the ETC-Paris at an early stage to prepare proposals for additions to the annexes (the habitats and species identified for Turkey because they are rare, endangered or even, when not endangered, typical for Turkey, but which are not on the BD and HD annexes).
6. Recommendations and Conclusions

At the end of the workshop, recommendations were formulated from the discussions carried out during the workshop with all participants for the development of national lists of habitats and species for the Annexes of the Habitats Directive.

Process

- The process of development of national lists for the Annexes of the Habitats Directive for conservation will benefit nature conservation in general. It is agreed that the accession of Turkey to the EU might take a long time, however, this process of development of lists is useful, especially to benefit from harmonization of policies, and possibly improvements of some existing policies (e.g. the need for regular monitoring of protected areas and species to ensure proper conservation).
- As the EU legislation states, the process of developing the national lists would be the responsibility of the Ministry of Environment and Forestry.
- It is important that the Ministry of Environment and Forestry sets itself targets for the realization of the national lists and to make budget available for necessary activities.
- A timeframe is needed for the ‘road-map’ for the development of national lists, to ensure that the process does not stagnate. The overall process to develop the national lists may take several years.
- Cooperation is required between (specialists of all) universities, as well NGOs.
- The process in neighboring countries and new member states like Bulgaria and Romania can be useful to benefit from their experiences and lessons learned (e.g. the criteria used) for the process in Turkey.
- Try to meet with, especially, new Member States and discuss the process they went through in the implementation of Natura 2000. Also meetings with other candidate countries will be very useful.
- It is recommended to have a firm scientific justification for the selection of new habitats and new species in Turkey; this can support the political process of designation of sites and species (as experienced by the other Member States).

Organization

- It would be useful to merge existing databases (like Noah’s Ark and Tübitak Arbis database) to bring together information.
- A group of experts (as inclusive as possible) should be brought together to establish a “N2000 expert” group with the participation of Universities, NGOs and other. In this group, a core-group should be established who will follow the N2000 process in Turkey and who will follow the process of the biogeographical seminars and data exchange. It was also proposed to establish a link between this group and the Ministry of Environment and Forestry.
- It would be supportive to empower groups or volunteers networks for data collection or data completion.

Research

- A long-term monitoring program needs to be developed; this monitoring program needs a tailor-made approach, it should be well founded on scientific principles so as to allow for long-term monitoring activities. For this to be identified, the past experiences from monitoring schemes realized in Turkey should be taken into consideration and the existing limitations, possible solutions should be identified.
Data
- Specialists should first agree upon a complete list for different species groups.
- Existing data should be shared between researchers, universities and NGOs.
- The gaps of information on species and habitats need to be identified.
- Priority species (which needs conservation measures at different scales) need to be identified.
- Ecological data on species should be increased and/or developed further so that distribution of these species can be identified.
- National Red List assessments should be carried out.
- High amount of research has to be carried out in the future, therefore the issue of research authorisation has to be discussed as soon as possible. Sometimes it can take up to 8 months to obtain the authorisation to carry out field work.

Communication
- Regular meetings will be beneficial to discuss issues on different species groups and habitats, and these meetings can permit exchanges of information and aligning procedures.
- A wide participation is required in such workshops, in particular by the Ministry of Environment and Forestry and specialists from other universities, NGOs, etc.
- The preparation of national lists should also be communicated through a website dedicated to the Natura2000 process.

Funding
- The Ministry of Environment and Forestry can support the process of development of national lists through funding, host venues etc.
- The Ministry of Environment and Forestry could apply for additional funds from e.g. European programs, like Europeaid for additional funding.
- TAIEX is a program which can further assist in Natura2000 implementation, through e.g. workshops provided by specialists from Europe. It is a process that needs to be initiated by the Ministry of Environment and Forestry.

Development of national lists

Habitat list:
- Check the existing habitats types and definitions to check their occurrence in Turkey. EU Interpretation Manual is an important source to check the plant species associated with the habitat description. The names of the habitats can be confusing.
- Use as a basis the outcomes of the previous studies (like the outcomes of the German Twinning Project, 2006). This needs to be updated as Bulgaria and Romania became EU-members since the project, and their accession led to adjustment of the reference lists.
- Use the Interpretation manual of the EU (2007) to confirm or update this document.
- Check with the reference lists for all the bio-geographical regions, particularly Mediterranean and Black Sea, on the presence of habitats and species.
- For specific habitats, field visits are required within Turkey. Furthermore, it will be useful to carry out exchanges with other members to gain a better understanding of the habitat types on the ground and to confirm whether a habitat coincides with the habitat type in Turkey.
- For those habitats not included in the current habitat lists, the criteria for proposal of habitats (i.e. threatened habitats, Unique species, Representative habitats of bio-geographic regions) should be checked to decide whether a habitat would qualify to be proposed for the national list and also to prepare the Anatolian bio-geographical region's list.
According to the information given by the EU experts in the meeting, EUNIS seems an irrelevant/not helpful system to use for habitat identification (also agricultural areas are not in EUNIS, although from Europe these include a great amount of biodiversity). ETC’s The EU Interpretation Manual for Natura2000 is key for description of habitats.

Species lists:
- Check presence of current Annex II species in Turkey.
- Propose new species to the EC, and ask for geographical exemptions. While doing so, different sources of information can be used as a basis (e.g., IUCN Red List status of species, status on Bern Convention, presence in other EU-27 states, National Red list status, German Twinning Project outcomes, KBA-list, data on distribution and population trends).
- Collect missing information on data deficient species.
- The following steps in the process were suggested by the EC as (applies for all accession processes).
  - Agreement by all Member States in Habitats Committee
  - Inform European Commission on the presence of Annex II species per biogeographic region
  - Reference list will be finalized at the start of biogeographical seminar
  - Regarding the large amount of endemic species occurring in Turkey, the EU experts in the meeting recommended to protect these species as much as possible through protecting their habitats instead of focusing on species specifically (unless it is mosaic species). It might be administratively very hard for Turkey to include all these species on Annex 2 of the Habitats Directive. If there is a strong wish from Turkish side to put species in Annex 2 this can be discussed with the ETC in Paris.
# Annexes

## Appendix 1: Workshop Program

<table>
<thead>
<tr>
<th>Time Flow</th>
<th>Topics</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00 – 09.30</td>
<td><strong>Introduction to the Workshop</strong> - Theo van der Sluis, Melike Hemmami</td>
<td><strong>Presentation &amp; Plenary</strong></td>
</tr>
<tr>
<td>09.30 – 10.45</td>
<td><strong>Presentation of the Study Tour Report</strong>, Özge Balkız and Melike Hemmami</td>
<td><strong>Presentation</strong></td>
</tr>
<tr>
<td>10.45 – 11.00</td>
<td><strong>Coffee Break</strong></td>
<td></td>
</tr>
<tr>
<td>11.00 – 12.00</td>
<td><strong>Introduction to methodologies on habitat classification and monitoring and its link with the preparation of the reference lists and criteria</strong>, Prof. Bob Bunce</td>
<td><strong>Presentation</strong></td>
</tr>
<tr>
<td>12.00 - 13.00</td>
<td><strong>Introduction to the development of criteria for the preparation of the Habitat Directive Annex II species</strong>, Dr. Johan Thissen</td>
<td><strong>Presentation</strong></td>
</tr>
<tr>
<td>13.00 - 14.00</td>
<td><strong>Lunch</strong></td>
<td></td>
</tr>
<tr>
<td>14.00 - 14.30</td>
<td><strong>Introduction to the group work (Exercise on applying the methodologies)</strong></td>
<td><strong>Presentation</strong></td>
</tr>
<tr>
<td>14.30 – 16.00</td>
<td><strong>Parallel Working Group Session</strong>: What are relevant criteria for selection of habitats and species in the light of the Turkish conditions and environment? Habitats, Bob Bunce, Theo, Özge Balkız Mammals &amp; Herpetofauna, Johan Thissen &amp; Rene, Melike</td>
<td><strong>Group Working</strong></td>
</tr>
<tr>
<td>16.00- 16.15</td>
<td><strong>Coffee break</strong></td>
<td></td>
</tr>
<tr>
<td>16.15 – 17.30</td>
<td><strong>Continuation of the Parallel Working Group Session</strong>: What are relevant criteria for selection of habitats and species in the light of the Turkish conditions and environment? Habitats, Bob Bunce &amp; Theo, Özge Balkız Mammals &amp; Herpetofauna, Johan Thissen, Rene, Melike</td>
<td><strong>Group Working</strong></td>
</tr>
<tr>
<td>17.30 - 18.00</td>
<td><strong>Wrap up of the Day</strong> (Presentation of the Habitats &amp; Species group outputs and closure)</td>
<td><strong>Plenary</strong></td>
</tr>
<tr>
<td>02nd December 2010, Thursday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
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</table>
| 09.00 – 09.15 | Reflection of the previous day – Melike Hemmami  
| 09.15 – 10.30 | Parallel Working Group Session  
|  | **What are the lists developed for neighbouring countries and biogeographical regions? Are they relevant in the light of the criteria and biodiversity of Turkey?**  
|  | Habitats, Bob Bunce & Theo van der Sluis  
|  | Herpetofauna, Johan Thissen & Rene Henkens  
| 10.30 – 10.45 | **Coffee Break**  
| 10.45 – 11.30 | Parallel Working Group Session  
|  | **Which species and habitats are typical for the Anatolian region and would justify inclusion in a future list?**  
|  | Habitats, Theo van der Sluis  
|  | Herpetofauna, Rene Henkens  
| 11.30 – 12.30 | Presentation of the outputs of the Habitats Working Group  
| 12.30 – 13.30 | **Lunch**  
| 13.30 – 16.00 | Working Group Session  
|  | Herpetofauna, Rene Henkens  
| 16.00 – 16.30 | Presentation of the outputs of the Herpetofauna Working Group  
| 16.30 – 17.15 | **Wrap up of the day and future steps**  


## Appendix 2: Communication Details of the Participants

<table>
<thead>
<tr>
<th>#</th>
<th>Name Surname</th>
<th>Institution</th>
<th>Title</th>
<th>Tel/Fax.</th>
<th>E-mail</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Özge Balkız</td>
<td>Doğa Derneği</td>
<td>Science Coordinator</td>
<td>312 481 25 45 / 312 481 25 09</td>
<td><a href="mailto:ozge.balkiz@dogadernegi.org">ozge.balkiz@dogadernegi.org</a></td>
</tr>
<tr>
<td>2</td>
<td>Melike Hemmami</td>
<td>Doğa Derneği</td>
<td>Water Policy Coordinator</td>
<td>312 481 25 45 / 312 481 25 09</td>
<td><a href="mailto:melike.hemmami@dogadernegi.org">melike.hemmami@dogadernegi.org</a></td>
</tr>
<tr>
<td>3</td>
<td>Johan Thissen</td>
<td>Dutch Mammal Society</td>
<td>Head of Research and Advice</td>
<td>+31 247 41 05 00</td>
<td><a href="mailto:johan.thissen@zoogdierversniging.nl">johan.thissen@zoogdierversniging.nl</a></td>
</tr>
<tr>
<td>4</td>
<td>René Henken</td>
<td>Alterra</td>
<td>Ms.</td>
<td>+31 317 48 49 92</td>
<td><a href="mailto:Rene.Henkens@wur.nl">Rene.Henkens@wur.nl</a></td>
</tr>
<tr>
<td>5</td>
<td>Fatmagül Geven</td>
<td>Ankara Üniversitesi</td>
<td>Dr.</td>
<td>312 212 67 20 / 1092</td>
<td><a href="mailto:fgeven@hotmail.com">fgeven@hotmail.com</a></td>
</tr>
<tr>
<td>6</td>
<td>Ö. Emre Can</td>
<td>Doğa Derneği</td>
<td>Dr. / Koordinatör</td>
<td>312 481 25 45 / 312 481 25 09</td>
<td><a href="mailto:emre.can@daad-alumni.de">emre.can@daad-alumni.de</a></td>
</tr>
<tr>
<td>7</td>
<td>Mustafa Sözen</td>
<td>Zonguldak Karaelmas Üniversitesi</td>
<td>Prof. Dr.</td>
<td>535 733 76 54</td>
<td><a href="mailto:spalaxtr@hotmail.com">spalaxtr@hotmail.com</a></td>
</tr>
<tr>
<td>8</td>
<td>Dincer Ayaz</td>
<td>Ege Üniversitesi</td>
<td>Doç. Dr.</td>
<td>506 502 79 89 / Fax: 232 388 10 36</td>
<td><a href="mailto:dincer.ayaz@ege.edu.tr">dincer.ayaz@ege.edu.tr</a></td>
</tr>
<tr>
<td>9</td>
<td>Kerim Çiçek</td>
<td>Ege Üniversitesi</td>
<td>Dr.</td>
<td>533 310 21 48</td>
<td><a href="mailto:kerim.cicek@ege.edu.tr">kerim.cicek@ege.edu.tr</a></td>
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<tr>
<td>10</td>
<td>Mesut Kirmacı</td>
<td>Adnan Menderes Üniversitesi</td>
<td>Yrd. Doç. Dr.</td>
<td>530 252 84 98 / 256 273 53 79</td>
<td><a href="mailto:mkirmaci@gmail.com">mkirmaci@gmail.com</a></td>
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<td>11</td>
<td>Uğur Kaya</td>
<td>Ege Üniversitesi</td>
<td>Prof. Dr.</td>
<td>535 849 51 87</td>
<td><a href="mailto:ugur.kaya@ege.edu.tr">ugur.kaya@ege.edu.tr</a></td>
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<tr>
<td>12</td>
<td>Eyup Başkale</td>
<td>Pamukkale Üniversitesi</td>
<td>Dr. / Koordinatör</td>
<td>533 247 10 36</td>
<td><a href="mailto:ebaskale@pau.edu.tr">ebaskale@pau.edu.tr</a></td>
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<tr>
<td>13</td>
<td>Yakup Kaska</td>
<td>Pamukkale Üniversitesi</td>
<td>Doç. Dr.</td>
<td>533 573 53 39 / Fax: 258 296 35 35</td>
<td><a href="mailto:caretta@pau.edu.tr">caretta@pau.edu.tr</a></td>
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<tr>
<td>14</td>
<td>Bob Bunce</td>
<td>Alterra</td>
<td>Prof. Dr.</td>
<td>Fax: +31 317 419 000</td>
<td><a href="mailto:bob.bunce@wur.nl">bob.bunce@wur.nl</a></td>
</tr>
<tr>
<td>15</td>
<td>Theo van der Sluis</td>
<td>Alterra</td>
<td>Msc.</td>
<td>+31 317 481 752 / Fax: 317 419 000</td>
<td><a href="mailto:Theo.vandersluis@wur.nl">Theo.vandersluis@wur.nl</a></td>
</tr>
<tr>
<td>16</td>
<td>Uğur Zeydanlı</td>
<td>Doğa Koruma Merkezi</td>
<td>Dr.</td>
<td>0312 287 81 44 / 20</td>
<td><a href="mailto:ugr.zeydanli@dkm.org.tr">ugr.zeydanli@dkm.org.tr</a></td>
</tr>
<tr>
<td>17</td>
<td>Gül Ayyıldız</td>
<td>Gazi Üniversitesi</td>
<td>Msc.</td>
<td>555 580 79 02</td>
<td><a href="mailto:ayyildiz.gul@gmail.com">ayyildiz.gul@gmail.com</a></td>
</tr>
</tbody>
</table>
Appendix 3: Presentation of the Study Tour

N2000 Çalışma Gezisi Notları
Özge Balkız, Melike Hemmami ve Yalçın Kanka

Hollanda N2000 Uygulamaları – Habitat Tipleri

- Habitat direktif – Bem Sözleşmesi için tasarımlar.
- 1980 lerde ilk hazırlanan başlıyor.
- Bu genel habitat tipleri coğrulukla meydana gelen tipler (fitosozolojik tanımlamalar) uzun süre tanımlanıyor. 9 temel sonu:
  - Kıt habitatları ve tuçlu (halofitik) habitatlar
  - Kıt ve kumalı kumalar
  - Tofaş habitatları
  - İlman küçük fundalik ve çalkıtlar
  - Her dem şeşil çalkıtlar (Sclerophyllous)
  - Doğal ve yar-doğal çayır oyuşunları
  - Baraklalar, turbaklalar
  - Kayalık habitatlar ve meydanlar
  - Ormanlar

- Özellikle İngiltere, Fransa ve Almanyadan etkin fazla - G. Doğu Avrupa ülkeleri dışında az

AB ülkelerinin artmasıyla:
- Annex I (Habitat tipleri)
  - 198 (1999, 15 ülke)
  - 218 (2005, 25 ülke)
- 228 (2007, 25 ülke – Polonya ve Romanya)
Aldeniz en zengin biyocoğrafik bölge!

### European Natura 2000 habitat types

<table>
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<tr>
<th>countries</th>
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<th>habitat types</th>
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</table>

### Hollanda

- Küçük bir ülke
- Atlantik biyocoğrafik bölgesi
- Yakın nüfus
- Büyük tarım alanları
- Doğar:
  - Büyük kütük parçalar châlende (çoche)
  - Su yörünğüyle ilgili sorunlar
  - Kirlilikle ilgili sorunlar

### Netherlands vs Romania

<table>
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Neredeyse hiç endemik (alt)tür yok!
Hollanda'da Habitat Referans Listelerinin Hazırlanması Süreci

- Fakir veri setleri:
  - Ulusal Vejetasyon Veritabanı – 400.000 tane
  - Vejetasyon hattaları, raporlar (Üniversiteler, STKlar ve bakanlıklar)
  - Uzmanlar
- Varolan AB habitat tipleri önemli/tehlike altındaki habitat tiplerini kapsıyor.

Hollanda'da N2000 Alanlarının Belirlenme Süreci

- 1996 – 27 alan Habitat Direktifi üzerinden önemiyor (yalıncı komutan alanları)
- 1998 – 89 alan ekledi (250 ha)
- 1999 – Atlantik Semineri ➔ YETERSİZ!
- STK ve bağımsız uzmanlar dahil oluyor
- 2007: Uygun Koruma Statüleri raporu (PCS)
- 2010: Resmi atama


Hollanda'da N2000 Alanlarının Belirlenme Süreci

Seçim Kriteri:

- Tüm habitat/türler için en iyi 5 alan
- Öncelikli habitat/türler için en iyi 10 alan
- Ekolojik olarak çeşitli habitatlar: alttüler (en iyi 3 ve 5 alan – tüm ve öncelikli habitatlar için)
- Sınırsızlık alanlar (Almanya, Belçika)
- Yaygın türler/habitatlar: alan seçmedi!
N2000 alanlarının koruma statüsü

Edinilen Dersler:

Yapısal:
- Natura 2000 Bakanlığı zararlı bir sürec - sonrasında olduğu bir süreç haline geliyor.
- Çok az bilinen bir konu - süreci zorlaştırıyor - İyi detaylı çok önemlidir.
- Bazı alanlarda polinik ve sosyal darbeci - az sayıda alan olabilir.
- Ulusalara çabaşmak sürecin iyileştirmesini sağlar.Sınıf:

Teknik:
- Veriño eski/eksik olması - N2000 süreci verilene güncellenmesini sağlar.
- Bazı türler çok yaygın (özellikle alınmadı değil) - bazı türler için çok az N2000 ağa geçiyor (başka korumazoek).
- Avrupa Komisyonu yeni kılavuzlar (paradigm) kısmında kata.
- Her ülkemin uygunlama şekli belirlenenden farklı!
Türkiye için Öneriler:

- Kaba vejetasyon / peyzaj bina kalanı taramanızda (her biyogeografi bölgesi için)
- En önemli "habitat tipleri" seçilmeli
- Hangi habitat tipleri hassaslıkla Natura 2000 Ek I alınmalı var? Hangi habitatların özmek anıtkıklardır (öncelikli):
  - Nadir, endemik, tehlike altadır
  - Büyük endemik türler ya da hayvanların türünüz kimdirmiyor — bu türlerin kimdir ek I’ye dlkanızda participação müstehcen!
- Az sayıda yeni - kapsamlı habitat türü — büyük karek yeşersiniz
- Çeşitli arazi örtüleri sınırlamaları habitat tiplerinin belirlenmesinde yalnızca bir katur olmak çok kullanılmaz --- Etnis de direk bir başlangıta bırakmayın!
- N2000 alanlarının büyükükleri bir dilkende diğerine değişiklik yaratılabilir
- STK ve ülkenizlerin kendi gölge listelerini hazırlayan bu alanlar biyogeografi seminerlerine tayin edebilirler.

Hollanda'da Sürüngen,
Çiftçaamalı ve Balık Koruma Çalışmaları

Ravan sürüngenler, çiftçaamalılar ve balıklar üzerine çalışan bir STK - 30 yılın ve 1500 gündeşil. 

Çalışma konuları:
- Veden depolama, tür dağılımı ve trenleri belirlenmesi
- Habitat genel anlamındaki karakteristiklerin belirlenmesi
- Habitatların korunması ve geliştirilmesi için bilgi, veri toplamak ve analiz etmesini

Daha belirtilen çalışmalar:
- N2000 alanlarının belirlenmesine uzmanlıkta vermek
- Yeşil ve ulusal koruma projeleri
- Restoreyam projeto
- Geneldelem eğitimi

Hollanda N2000
Sürüngen Türleri

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<th>Flora and Fauna Act</th>
<th>Convention of Bern (*)</th>
<th>EC-Habitat Directive</th>
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<td>Coronella austriaca</td>
<td>EN</td>
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<td>Podarcis muralis</td>
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Hollanda N2000 Çiftyaşamlı Türleri

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<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Yellow-bellied toad</td>
<td>Bombina variegata</td>
<td>OR</td>
<td>3</td>
<td>2</td>
<td>24</td>
</tr>
</tbody>
</table>

Hollanda N2000 Balık Türleri

<table>
<thead>
<tr>
<th>English name</th>
<th>Scientific name</th>
<th>Red List NL</th>
<th>Flora en Fauna Act</th>
<th>Convention of Bern (†)</th>
<th>EC-Habitat Directive (Annex)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brook lamprey</td>
<td>Lampetra planeri</td>
<td>EN</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Darter</td>
<td>Rhinichthys osculus</td>
<td>VU</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Alle shad</td>
<td>Alosa alosa</td>
<td>LC</td>
<td>3</td>
<td>2</td>
<td>2,5</td>
</tr>
<tr>
<td>Twat shad</td>
<td>Alosa fallax</td>
<td>EW</td>
<td>3</td>
<td>2</td>
<td>2,5</td>
</tr>
<tr>
<td>European weatherfish</td>
<td>Anguilla anguilla</td>
<td>VU</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Whitefish or coho</td>
<td>Oncorhyncus kisutch</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2,4</td>
</tr>
<tr>
<td>Spined Loach</td>
<td>Cobitis taenia</td>
<td>LC</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Bloodfish</td>
<td>Catos gobio</td>
<td>LC</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Lamprey or River Lamprey</td>
<td>Gymnothorax anguilla</td>
<td>EW</td>
<td>3</td>
<td>2</td>
<td>2,4</td>
</tr>
<tr>
<td>Anguilla</td>
<td>Anguilla anguilla</td>
<td>EW</td>
<td>3</td>
<td>2</td>
<td>2,5</td>
</tr>
<tr>
<td>Quillback</td>
<td>Alosa fallax</td>
<td>EW</td>
<td>3</td>
<td>2</td>
<td>2,5</td>
</tr>
<tr>
<td>Atlantic Salmon</td>
<td>Salmo salar</td>
<td>EW</td>
<td>3</td>
<td>2</td>
<td>2,5</td>
</tr>
<tr>
<td>Sea Lamprey</td>
<td>Petromyzon marinus</td>
<td>x</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

2002 yılında Avrupa Komisyonu Hollanda hükümetinin beş balık türlerini için ek alanlar belirlemesi istiyor:
- Cobitis taenia
- Triturus cristatus
- Rhodosaurus varius
- Misgurnus fossilis
- Catos gobio

2003 yılında hükümet RAVON'dan bu konuda destek istiyor:
- Triturus cristatus, Misgurnus fossilis ve Catos gobio için ek alanları belirlemesi
- Cobitis taenia ve Rhodosaurus varius türlerinin yaygın olmaları ve habitat tipleri için tanımlanmış alanları bu türler için de önemli alanların kapsaması nedenyle yeni alan önerilmesi istenildi.
2005 yılında RAVON yeni alan önerileri getiriyor

2010 yılında Hükümet Ravon'dan yeni tür dağılım verilerini istiyor.

RAVON’un N2000 süreciyle ilgili eleştirileri:

- Herpetofauna ve balık türlerinin dağılımlarının N2000 alanlarında %20’den azın bulunması, bu türlerle yönetim planları da yeterince yer verilmemesi,
- Belirli canlı grupları için belirlenen alan koruma önceliklerinin diğer canlı gruplarını olumsuz etkileyebilmesi (kuş – herpetofauna),
- 165 N2000 alanının yönetim planının hazırlanmasında 15 farklı kurumdan uzmanların görüşü bildirilmesi ancak bütün alanlara ilgili süreçte tek bir kurumun hakim olmaması.

Doğaya İlgili Veriler Ulusal Otoritesi

- 2005 yılında Hükümet finansal desteğiyle kurulmuş bazı enstitü,
- Temel hedefi ekolojik hedeflerin ekonomik hedeflerle çatıştığı durumlara çözüm getirmek,
- Flora ve fauna verilerinin bir veritabanında bir araya getirilmesi ve ilgililerle paylaşılmış – Hollanda'da çok doğrultu durumda, farklı formatlarda toplanmış bir çok tür verisi bulunuyor,
- Enstitü bu farklı verileri standart hale getirmek, hatalı verileri sűzmek ve kullanıma hazır hale getirmeyi amaçlıyor.
Ulusal Flora Fauna Veritabanı

10 STK ve Amsterdam Üniversitesi Çalışmaları Destekliyor. Hükümetle bağlanılarak var.

Temel bölümleri:
1. Veri girisi arayüzü
2. Arayüz
3. Veri onaylama hizmeti
4. Veri edeme / alma arayüzleri
5. Sorgulama arayüzü.

- Toplam 30 milyon satır veri
- Her yıl 1 milyon satır veri girişi

• CBS uzen nods veri girişi
• Veri alım formu
• Veri ederleme hizmeti (verinin devamlığı için ödeme yapma kılavuzu)
Veri Onaylama Süreci

- Ulusal Otorite’nin en temek görevi
- Otomatik onay süreci ve uzman grupları aracılığıyla.

Komitenin diğer görevleri:

- Gözetim protokollerinin oluşturulması – Yarasa türleri için oluşturulan protokol Hollanda Flora Fauna Yasası tarafından tanımlanır ve davalarda verilen düzgün toplanıp toplanmadığını değerlendirmesi sürecinde kullanılmak üzere kabul ediliyor.
- Bu tip çalışmalar veri toplama sürecinin standartlantı edilmesini, böylece karar alma süreçlerinde düzenin verilerin kullanımını sağlıyor.
- ÇED süreçlerinde veritabanından bilgi elde edilebiliyor – zorunluluk değil.

Hollanda’da N2000 ve Doğa Politikası

- Doğal alanlar yanya iniyor:
  - 1900 - 900,000 ha
  - 1990 - 450,000 ha
- Neden N2000?
  - Çevre ve doğa politikaları biyolojik çeşitlilik kaybını durdurulmada yetersiz,
  - Kırımı liste türlerinin sayısı artıyor.
**Hollanda'da N2000 sürecinin adımları**

- N2000 alanlarının belirlenmesi
- Bütün alanlar için N2000-bedellerinin belirlenmesi
- Ulusal yönetimlerin uygulanması
- N2000 alanlarının resmi alınması
- Tüm N2000 alanları için Yönetim Planları'nın hazırlanması

**Görev Dağılımı**

<table>
<thead>
<tr>
<th>Roles:</th>
<th>responsible</th>
<th>workers</th>
<th>coordination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selection</td>
<td>Minister ANF</td>
<td>Project group</td>
<td>DK, now PON2000</td>
</tr>
<tr>
<td>Proposal to EU</td>
<td>Council of Ministers</td>
<td>Civil servants</td>
<td>DK, now PON2000</td>
</tr>
<tr>
<td>Site objectives</td>
<td>Minister ANF</td>
<td>Project group</td>
<td>DK, now PON2000</td>
</tr>
<tr>
<td>Designation</td>
<td>Minister ANF</td>
<td>PON2000</td>
<td>PON2000</td>
</tr>
</tbody>
</table>

- 2004 yılında 162 alan Avrupa Komisyonu tarafından onaylandı,
- 35 alan bankalık tutunduruldu resmi olarak komisyon alanları edildi
- 127 alanın resmiyle alınması süreci devam ediyor - 2010 yılı

![Habitat and Bird Directive areas](image)

162 alan:
- 1,117,000 ha
- 1/3 karasal, 2/3 deniz
- Hollanda'nın %10'unda
Yönetim Planları

İçerik:
1) Güncel durum ve trendler
2) Natura 2000-hedefleri
3) Eylemler
4) Komuna önlemleri
5) Değerlendirme ve izleme
6) Finans

Mali Olanaklar

- Var olan bütçeler (doğa yönetimi, çevre, suyu, yerel kalkınma ve tasarım)
- Hollanda'da her bir ulusal mali olanak yok
- Tahmin maliyet: € 2 milyon
- Tahminin ekstra maliyet: € 30-50 milyon/yl
- Tahminin ek yatırım: € 50-200 milyon
- 101 bölgesel N2000 Yönetim Planları maliyeti: € 28 milyon

Notlar

- Türkçe haberdarlık ilgili bilgiler çoğunlukla Akademisyenler ve STK'lar tarafından sağlanır.
- N2000 alanlarının belirlenmesi sürecinde tamamı alanlar az dahi ediliyor – 100 ha sürekli doğal alan barındıran zorunluluğun getiriyor.
- Avrupa komisyonu tıpkı elcesi yeteri N2000 alan belirlenmesi durumunda para cezası çarpanlık ediyor - 500,000 €/gün
- Kayı ve Hafıza Direktörlüğü alandaki son durum her zaman birbirinle uyantı olmak zorunda değil
- Hafıza Direktörü kapasitesinde gelişim raporlarının her 6 yılda bir.
Avrupa Konu Merkezi – Biyolojik Çeşitlilik

Avrupa Çevre Ajansı – European Environmental Agency
Çevre’ye ilişkin önceliklerin politikalarına entegresyonu
Doğa korumaya ilişkin kararların paylaşımı
Sürdürülebilirlik

http://www.eea.europa.eu/

5 yılda 1 Avrupa Çevre Raporunun yayınlanması
Farklı konu başlıkları alında çeşitli raporların hazırlanması

Avrupa Konu Merkezi / European Topic Center

5 Farklı Konu Bağlığı:
✓ Hava ve İklim (Bilbao, NL)
✓ Biyolojik Çeşitlilik (Paris, FR)
✓ Arazi Kullanımı ve Mekanik Bilgi (Barcelona, ES)
✓ Sürdürülebilir Tüketim ve Üretim (Kopenhag, DK)
✓ Su (Praag, CZ)
Avrupa Konu Merkezi – Biyolojik Çeşitlilik / European Topic Center on Biodiversity

- Avrupa Çevre Ajansı ile birlikte çalışan bir konsorsiyum
- Avrupa biyolojik Çeşitliliğine ilişkin durum ve eğilimleri göz önünde bulundurarak AÇA'nın raporlama sürecine destek verir
- AB Doğu ve Biyolojik Çeşitliliğe ilişkin politikalarını uygulamasını destekler
- Konsorsiyum 9 kurumdan oluşuyor liderliği de Paris Ulusal Doğu Tarihi Müzei tarafından yürütülüyor
- Ana eksp 12 kişiden oluşuyor (7 ilke) ve diğer kurumlardan destek sağlanıyor

AB Direktifleri ve Natura 2000 Çerçevesinde
ETC/BD’nin Rolü

AB Çevre Genel Müdürlüğüne (Environment DG) teknik ve bilimsel sağlamak:

✓ Natura 2000 veri bankasının yönetimi
✓ Biyocoğrafik Seminerlerin ve iki taraflı toplantıların gerçekleştirilmesi
✓ Topluluk için önemli alanların listelerinin hazırlanması (SCI)
✓ Eklere yapılacak değişikliklere ilişkin tavsiyeler üretmek
✓ Habitat değerlendirme rehberinin düzeltmesini yapmak
✓ Madde 17 altında yer alan raporlama sürecinin takibi
Biyoçografik Bölgeler:
Bölgeler arasında değerlendirme:
Potansiyel Doğal Bili Ortusu Haritası
Zümrut Ağı ve Natura 2000 için ayrı hantaların kullanılması

Biyoçografik bölgeler haritası FP2/BD tarafından detaylandı

Biyoçografik Seminerler:
Ulusal öneriler her bir tür ve her bir habitat için tek tek değerlendirilmek
Yeterli alanın belirlenip belirlenmediğini değerlendirilmesi
Tür dağılımının göz önünde bulundurulduğuunda değerlendirilmesi

AB Genişleme:
- Direktifin eklenmesi yapılacak değişiklikler için DG Environment'a taziye vermek
- Aday ülkelerin hizmetin suya destek vermek

AB Habitat Yorumlama Rehberi Güncellemeleri:
- Yeni habitatlara tamamlaması
- Yeni habitatlara epik deşifre edilmiş
- Aşılamanı düzeltmesi

Raporlama takibi (Madda 17 – Habitat Direktifi): 6 yılda 1
- Raporlama format ETCBD önderliğinde farklı kurumların desteği ile oluşturulması
- Bu dönem bir güncelleme çabası yapılarak
Natura 2000'in geçmişi

1790'tan 1990'a uzanan bir süreç:
Çevre korunmasına ilişkin farkındalığa atış

(IUCN kimliği listeleni, Stockholm Konfresanı, petrol krizi vb.)

✓ 1970 UNESCO – İnsan ve Biyosfer Programı
✓ 1971 Ramsar Sözleşmesi
✓ 1979 Bonn Sözleşmesi
✓ 1979 Bern Sözleşmesi
✓ 1992 Biyolojik Çeşitlilik Sözleşmesi

Avrupa Birliği Süreci:

1973 – 1976: İlk Çevre programı
1985: AR'nin çevre korunmasına ilişkin ilk resmi kanunu
1979: Kuş Direktifi – 12 Üye ülke tarafından kabul edildi
1992: Habitat Direktifi – Bern Sözleşmesinin Uygulanması olarak

CORINE'nin geliştirilmesi

✓ CORINE Hava
✓ CORINE Biyotop
✓ CORINE Arazi Örtüsü
✓ CORINE Su

AÇAT'nın kurulmasında yönelik ilk adamlar gibi değerlendirilebilir

CORINE Biyotop Sınıflandırması:

Alanların evrenleri (veri bankası)
Biyotop Sınıflandırması
Biyotop sınıflandırması fitocenoloji tanımlanılan temel alır
Biyocoğrafik Seminerler: Uygulamaların deseleklenmesi için bir araç

Bazı Üye Devletlerde N2000 Alanları aynı başka ulusal statüllere de sahip olabiliyordur (örn. Çarşamba hem SAC hem de SPA aynı 6 farklı ulusal konuma statüstine sahip).

Natura 2000 alanları ülke sınırlarını tanımayan bir aggrav bu yüzden bazı zamanlarda ülkeler arası önlemler alınmak gerektiğiğinde:

Direktörler Aras refused ve Hedeflerin çerçevesini çizmek ancak üye ülkeler arası süreç ve yönetiminde kullanılabilecek farklı/çeşitli yaklaşımlar belirlenecektir. Örn. Fransa ve Almanya’da bulunan Natura 2000 alanlarının toplanan yüzde olarak yakından ancak Fransa geniş alanlar belirleyi tercüh ederken Almanya birçok küçük alan belirlemeyi tercüh etmiştir.

HABITATLAR:

✔ Liste 231 farklı habitat'ten oluşmaktadır.

✔ Belirli biyocoğrafik bir bölgenin nadir, tekirda alanda veya tipik habitatlarını bu listede yer almaktadır. Genelde bitki toplulukları olmakla birlikte peyzaj ve abiyotik özelliklen nedeniyle eklenmiş habitatlar da yer almaktadır.

✔ Tanımlara Habitat Yönlüma Rehberinde ulusal sınırlardırma bağtırılardı ile birlikte verilmişdir.

(istenmeyen çoğu peyzaj değerlerine bağlı olarak seçilen habitatlardan oluşmaktadır. E.g 1620 Boreal Balkık Adaları ve küçük adalar)
Yorumlamalardan doğan farklıklar:
Farklı ülkeler (hatta bazen aynı ülke içinde farklı bölgeler) bazı habitatların farklı yorumlandıkları bu yüzden komşu ülkelerden uzmanlarla bir araya gelmek yorumların daha uyumlu olmasına destek sağlayacaktır.

Marine Natura 2000 Alanları: Daha çok yeni bir süreç bu nedenle üye ülkelerin alanları üzerinden belirlenmesi ve önerilmesi için ek süre verilmiştir

Karasal tür ve habitatların neredeyse tamamlanmış durumda ve odağın alanlarının yönetimine kaydedilmek istendiği kendini gösteriyor.

Maddeler 17 (napotama) birçok habitat ve türün uygun korma statüsüne ulaşmak için restorasyon workslarına ihtiyaç duyduğunu gösteriyor.

**AB Üyeliğine Hazırlık Süreci**

- Direktiflerin Ulusal Mevzuata aktarılması
- Her bir biyosöfografik bölgesinde var olan Ek 1 Habitat ve Ek 11 türlerinin tanımlanması (Referans Listesi)
- Gerektiği olduğu durumlarda direktif eklenecek yeni bölgeler için sunulan değişiklik önerilerinin sunulması ve mutabakata varaması (detaylı bilimsel değerlendirme ile birlikte)
- Topluluğun önemli alanlarını (SCI) belirlenmesi ve üyelik güvencesi için hazırlanması
- Özel korunan alanların (SAPs) üyelik güvencesinde ilan edilmesi için gereklilik aralığı hazırlanması

İhtiyaçlar:
- İyi evanteheredir
- Yeni habitat tanımları
- Yeni tür tanımları
- AB geleneklerine eklenecek adaptasyonu edilmesi gerekliyor.
Hangi Habitat ve Türler eklenebilir?

Habitatlar

(i) Doğal yaşamları itibariyle yokloma tehlikesi altında olanlar,

(ii) Regresyonları veya önemli derecede dar yaşam alanları nedeniyle küçük doğal yaşam alanları olanlar

(iii) Sözcü komşu biyogeografik bölgeye dair bir veya birçok tipik özellikleri örneği sergileyen alanlar.

Türler

(i) Tehlike altında.

(ii) Hassas

(iii) Nahir, henüz tehlike altında veya hassas durumda olmayan ancak risk altında küçük popülasyonlara sahip olan türler.

(iv) Endemik ve özel önem gerektiren türler

Yeni eklenecek türler için argümanlar

Olumlu karşılıklar:

✓ Bern sözleşmesinin I, II ve III'ye listelenmesi olması
✓ Köresel, Bölgesel ve Ulusal Kamuşi Listelerinde yer alması

Olumsuz karşılıklar:

✓ Yeni taksonomik gruplar
✓ Taksonomik sorunlar çıkaran türlerden kaçırmaması gerekir
✓ Genellikle Habitatı kapayışa red ediyorlar
✓ Hem ek II hem de EK IV'de eklenmesi
Eklerin adaptasyonuna dair birkaç örnek

Maskeli sivri fare (Sorex cascatiae) Polonya'da kırmızı listede türü arı halinde ve Finlandiya'da tehlike altındaki türler arasında sayılanlığı için kabul edilmiyor.

Macaristan kör fare'yi öneriyor ancak Bulgaristan Balkanlarında yaygın olanın nedeniyle itiraz ediyor.

Kabul edilen ve sınırlı dağılım gösteren endemik tür örnekleri:

Fauna

Marmota marmota latirostris – Polonya'ya ve Karpatlara endemik

Ovis orientalis – Kına'ya endemik

Flora

Rhinanthus osiliensis – Ban, Kuzey Ban Saarına adası, endemik (EE).

Habitat Direktifi Madde 17 Raporlama

✓ 6 yılda 1 raporda gerekliyor

✓ Raporlar her bir biyogeografik bölge için her bir habitat ve türü kapsamıyor

✓ Web tabanlı bir raporlama sistem

✓ Bölgesel değerlendirme ETC/BD tarafından yapılır

✓ Üye devlet ve ETC/BD daha sonra bunlan online geri bildirim süreci için yaygınlaşmak zorunda

✓ Yer bir değerlendirme için bir veri dokümanı hazırlanıyor

✓ Gereklili durumunda bir denetim süreci gerçekleştebiliyor
Maddede 17'ın kullanım alanı

- AB Poliüklarnı kurtarıp sağlamak
- Göstergeler
- AB Anıştırma projelerine katılmak
- Kapıda, ileri proplarına ve diğerlerine bilgi aktarmak

Daha fazla bilgi için:

http://biodiversity.eionet.europa.eu/article17
Referans Listeleri

✓ Her bir biyocografik bölgede üye devletlerde var olan habitat (Ek 1, Habitat Direktifi) ve türlerin (Ek 11, Habitat Direktifi) listelenmesi;

✓ Sadece Üye Devletleri Topluluğ için önemli olan örnek yapmakla yükümlü olduğu düzenli olarak var olan türleri ve habitatların listelenmesi;

✓ Düzensiz görülen ve rastlansal konulanan listeye dahil edilsin. Referans listeleri her bir üye devletin tür listesi değildir.

✓ Listelerde edilen yeni veriler (arastırmalar, tür/habitatın dağılımına ilişkin değişiklikler v.b.) nispeten düzenli olarak güncellenmekteidir.

✓ Denizel ve Karasal habitat ve türler için aynı referans listeleri hazırlayın ancak göcmeyen balk türleri her iki listede yer alabilir.

Daha detaylı bilgiler Ziyaret raporu tamamlanırdığında sizlere paylaşılacaktır...

Teşekkür ederiz

Melike Hemmami, Özge Balkız ve Yakup Kaska

Doğa
www.dogadernesi.org

Pamukkale Üniversitesi
Appendix 4: Presentation Habitats

Background to defining Natura 2000 habitat types

Bob Bunce

Annex 1 habitat types

Annex I habitats are the legal framework for habitat protection in the EU and are now used as basis for Natura2000 series

Content

- History of habitat classification
- Habitat types in EU – some background
- Key to Annex I habitats
- Natura 2000 implementation process
- Some suggestions for approach Turkish list of habitat types

Annex 1 habitat types

Number of habitat types increase with new accession countries

218 types (2003, 25 countries)
238 types (2007, 27, Bulgaria, Romania, ....)

European Natura 2000 habitat types

Main reasons for selection:
1. Threatened habitats
2. Unique species
3. Representative habitats of biogeographic regions
4. Characteristics of habitats (discussed later)

Reference lists (Annex I and Annex II)
For each country
For each biogeographical region

History of habitat classification

- Humboldt (1804) named biomes of the world
- Raunkaer (1904): plant life forms as expressions of the environment
- Moss (1910) vegetation of Britain
- Braun-Blanquet & Tüxen (1930s) vegetation classification

(1845 onwards): nature reserve selection, increasingly based on habitats
Woodward (1905) world biomes
European union (1988) CORINE biotopes
Palaeartic & Annex I habitats
Moss & Davies (1998) EUNIS classification (not to be confused with EUNIS information system)
Bunce et al. (2008) BIOHAB
European Biogeographical regions

- Alpine
- Arabian
- Arctic
- Atlantic
- Black Sea
- Boreal
- Continental
- Macaronesian
- Mediterranean
- Panonian
- Steppic

Procedure for proposing new habitats

Habitat Directive - Annex I - addition of habitat types

- Proposal for addition
- Geographical restriction

Prepared by:
- Name of preparent:
- Classification of Patronym Medium 5/91: Code No.
- Habitat type:
- Code category:

Biogeographical region(s) (please mark with "x"):
- Mediterranean
- Steppic
- Continental
- Boreal
- Black Sea

Community interest:
Please mark with "x" for which of the following subparagraphs of Article 1.c of the Habitats Directive the habitat is proposed:
- habitat is in danger of disappearance in its natural range or by reason of its characteristics or one of the six biogeographical regions, which one(s):
- is the habitat proposed as a priority one:
- is the habitat present in EU 27:

European Natura 2000 habitat types

<table>
<thead>
<tr>
<th>countries</th>
<th>habitat types</th>
<th>species</th>
<th>flora</th>
<th>fauna</th>
</tr>
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<tbody>
<tr>
<td>Boreal</td>
<td>5</td>
<td>63</td>
<td>53</td>
<td>51</td>
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<tr>
<td>Atlanto</td>
<td>9</td>
<td>121</td>
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<td>32</td>
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<tr>
<td>Alpine</td>
<td>12</td>
<td>89</td>
<td>80</td>
<td>50</td>
</tr>
<tr>
<td>Continental</td>
<td>10</td>
<td>131</td>
<td>116</td>
<td>35</td>
</tr>
<tr>
<td>Pannonian</td>
<td>4</td>
<td>54</td>
<td>115</td>
<td>46</td>
</tr>
<tr>
<td>Black Sea</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Steppic</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Macaronesian</td>
<td>3</td>
<td>141</td>
<td>145</td>
<td>142</td>
</tr>
</tbody>
</table>

Example: comparison The Netherlands - Romania

<table>
<thead>
<tr>
<th>Netherlands</th>
<th>Romania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat types</td>
<td>51</td>
</tr>
<tr>
<td>Birds</td>
<td>10</td>
</tr>
<tr>
<td>Fishes</td>
<td>20</td>
</tr>
<tr>
<td>Mammals</td>
<td>8</td>
</tr>
<tr>
<td>Fish</td>
<td>10</td>
</tr>
<tr>
<td>Reptiles/Fishes</td>
<td>2</td>
</tr>
<tr>
<td>Invertebrates</td>
<td>10</td>
</tr>
<tr>
<td>Plants/Flora</td>
<td>5</td>
</tr>
</tbody>
</table>

Procedure for proposing new habitats

- Name of habitat type:
- Definition and characteristics:
- Characteristic species:
- Comments on restriction to the proposal (if necessary):
- Geographical distribution (please add maps, if possible):
- Further comments concerning the geographical distribution:

- Important references / literature / publications:
- Contact person for additional questions concerning this habitat type:
- Name:
- Institution:
Natura 2000 implementation Atlantic region
- 166 sites (28% of a total of 600 sites), only already protected sites
- 1988 sites: I.D. > larger than 250 ha
- 1988 Atlantic: total land 1 (17% of 17%); insufficient (17%)
- 1988; biotope larger than 250 ha
- * some habitats/species too little cover (10% to 20%)
- ecological variation / spatial distribution
- NGO: independent expert: Alteva (involved in process)
- 2003: 165 sites in progress: proposed to EU (sufficient);
- 2003: decentralisation/management plans, impact assessment, ....
- 2007: report on Favourable Conservation Status
- 2010: formal assessment
- 1996-2005: national legislation adopted for species and sites protection

Natura 2000 implementation in the Netherlands
- Selection criteria:
  - Best 5 sites for each habitat/species (quality and quantity)
  - Best 10 sites for priority habitats/species
- Broad (ecologically varied habitats / subtypes based on national vegetation class - different alliances)
  - Best 5 sites for each subtype
  - Best 5 sites for priority subtypes

Other remarks
- European Topic Centre coordinates information between countries
- Habitat descriptions agreed by the EU habitats committee
- Names agreed by the council of Ministers
- Good experience with working with expert knowledge (relatively small groups): quick, pragmatic + broad consultation
- European Commission strict in selection criteria (seminars)
- Unknown makes uncertain: good communication and information is essential
- Most countries have some differences in interpretation
- Article 17: countries required to report on conservation status of Annex 1 Habitats

Some suggestions...
- Turkey: large, diverse country; totally new landscapes compared to European Union; many endemic species
- Overview of vegetation/landscape units within each biogeographical region provides a basis for further research
- Identify which habitats/types are already included in EU
- Select most important representative ‘habitat types’
- Which ones are already covered by Natura 2000 Annex 1 (sometimes within intervention)
- Which sites are important to be added (priority):
  - Rare, endemic, widespread
  - Containing many endemic plant and animal species
- These species should not be added, naturally to the Annex 1
- Few broad defined new types instead of many small ones
Appendix 5: Presentation Johan Thissen

Reference list for Habitats Directive
Annex II species

Johan Thissen
Dutch Mammal Society
(Head of Research and Advice)
On behalf of Alterra

Categories of Habitats Directive species

- Annex II species: designation of Natura 2000 sites (active site-oriented measures)
- Annex IV species: forbidden to persecute and to disturb the animals and their breeding and resting sites (passive legal protection)
- Annex V species: exploitation (for example hunting) allowed, but under conditions

Reference lists process for Annex II species

Step 1: Check presence of current Annex II species in Turkey
Step 2: Propose new species to European Commission, and ask for geographical exemptions
Step 3: Agreement by all Member States in Habitats Committee
Step 4: Inform European Commission on presence of Annex II species per biogeographical region
Step 5: Reference list will be finalised at the start of the biogeographical seminar

European Topic Centre on Biological Diversity (Paris) will do work on behalf of the European Commission

For each biogeographical region Turkey has to make a reference list of Annex II species

Johan Thissen and Natura 2000
1992-2001 senior staff officer biodiversity at the Ministry of Agriculture, Nature and Food Quality
- member of the EU Scientific Working Groups for the Birds Directive and the Habitats Directive
- first selection of the Netherlands Special Protection Areas under the Bird Directive and of the proposed Sites of Community Interest under the Habitats Directive

Johan Thissen and Natura 2000
2005-2007 senior staff officer Natura 2000 at the Ministry of ANF
- secretary of the project “goals for Natura 2000”
- member of Natura 2000 help desk for authorities


- endangered, […] OR
- vulnerable, i.e. believed likely to move into the endangered category in the near future if the causal factors continue operating OR
- rare […] OR
- endemic and requiring particular attention...

Such species are listed or may be listed in Annex II and/or Annex IV or V

Source: art. 1 of the Habitats Directive
Additional policy oriented criteria for new Natura 2000 species

a) site oriented protection should be useful
b) species which are threatened mainly by persecution or disturbance, are candidates for Annex IV
c) those if you have a complex of habitats which use complex habitats can be logical candidates for Annex II and/or Annex IV

d) species which use complex habitats and their habitat can be logical candidates for Annex II and/or Annex IV

Form of ETC/BD for proposal of species

Habitats Directive - Annex II, IV and V - addition of species

<table>
<thead>
<tr>
<th>PROPOSAL FOR</th>
<th>Annex II</th>
<th>Annex IV</th>
<th>Annex V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species Name</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Further comments on the proposal for the addition of the species:

<table>
<thead>
<tr>
<th>Further comments on the proposal for the addition of the species:</th>
</tr>
</thead>
</table>

Recommendations for proposal of new Natura 2000 species

- Propose not too many Annex II (Habitats Directive) species
- Do NOT propose species which also occur in existing EU Member States (now the EU-27)

More recommendations

- Select a good species list
- Consider status in Annex II of Bern Convention (was very important in the beginning of the Habitats Directive)
- Consider status in IUCN World Red List of Threatened Species
- Consider status in Red List of Turkey

Internet infrastructure for species lists

Pan-European Species directories Infrastructure (PESI), running project, funded by the European Union under the Framework 7 Capacities Work Programme.
- EuroMed Plantbase (growing, first phase financed by EU under Framework 5)
- Fauna Europaea (does not cover Asian Turkey)
- European Register of Marine Species

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Nothing wrong with good handbooks

Work that has been done already
- Results of DE-TR twinning project 2004-2006
- Annexes of Key Biodiversity Areas books of Dogu Derneği

Let’s make it work!

Nothing wrong with good handbooks
Appendix 6: Form of ETC/BD for proposal of habitats

Habitats Directive - Annex I - addition of habitat types

PROPOSAL FOR

ADDITION

GEOGRAPHICAL RESTRICTION

Proposed by

Name of habitat type:

CORINE classification 1991 / Code No.:
Classification of Palearctic Habitats 1993 / Code No.:

Habitat category:
and sub-category:

Biogeographical Region(s) (please mark with "x")

- Mediterranean
- Pannonic
- Black Sea
- Steppic
- Continental
- Alpine
- Boreal

Community interest
Please mark with "X" for which of the following subparagraphs of Article 1 c of the Habitats Directive the habitat is proposed:

- habitat is in danger of disappearance in its natural range
- habitat has a small natural range following its regression or by reason of its intrinsically restricted area
- habitat represents an outstanding example of typical characteristics of one or more of the six biogeographical regions;

which one(s):

Remarks:

Is the Habitat proposed as a priority one:
- Yes
- No

Is the Habitat present in EU 27:
- Yes
- No
Name of habitat type:

Definition and Characteristics:

Characteristic species:

Comments on restriction to the proposal (if necessary):

Geographical Distribution (please add maps, if possible)
- in the country

Further comments concerning the geographical distribution:
(e.g. known subtypes, regional varieties, loci-typici, correspondence with other habitat or vegetation classification systems)

Phytodynamic successions, zonations or mosaics:

Reasons for decline or threats:

Further remarks:

Important references / literature / publications:

Contact Person for additional questions concerning this habitat type:
Name:
Institution:

Postal Address:
Country Phone No
Fax No E-mail
Appendix 7: Form of ETC/BD for proposal of species

Habitats Directive – Annex II, IV and/or V – addition of species

PROPOSAL FOR

<table>
<thead>
<tr>
<th>Annex</th>
<th>ACTION</th>
<th>GEOGRAPHICAL RESTRICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Proposed by

Species Name
Latin Name (incl. Author + Year)
Latin Synonyms:
English Name:
French Name:

Taxonomy:

<table>
<thead>
<tr>
<th>Phylum</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Class | Family

<table>
<thead>
<tr>
<th>Short Description / Distinguishing Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>.........................................................................</td>
</tr>
<tr>
<td>.........................................................................</td>
</tr>
<tr>
<td>.........................................................................</td>
</tr>
</tbody>
</table>

If possible please add a drawing of this species:
(Copy of a drawing in existing literature)
Is the species present in EUR 27?  □ Yes  □ No

Name of Biogeographical Region(s) (only if proposed for Annex II) (please mark with „X‟)

☐ Pannonic  ☐ Mediterranean  ☐ Black Sea  ☐ Steppic
☐ Continental  ☐ Alpine  ☐ Boreal

Community Interest
Please mark with „X‟ for which of the following subparagraphs of Article 1 g of the Habitats Directive the species is proposed

☐ endangered, except those species whose natural range is marginal in that territory and which are not endangered or vulnerable in the western palearctic region

☐ vulnerable, i.e. believed likely to move into the endangered category in the near future if the causal factors continue operating

☐ rare, with small populations that are not at present endangered or vulnerable but at risk. The species is located within restricted geographical areas or are thinly scattered over a more extensive range

☐ endemic and requiring attention by reason or the specific nature of its habitat or the potential impact of its expl. conservation status.

Remarks:

..........................................................................................................................................................................................................................................................................................................................................................................................

Is the Species proposed as a priority one:

□ Yes  □ No

Comments on restrictions to the proposal (if necessary):
(only certain subtypes, only certain parts of Europe etc.)

..........................................................................................................................................................................................................................................................................................................................................................................................

Ecology / most important Habitats:

..........................................................................................................................................................................................................................................................................................................................................................................................
Geographical distribution
(if possible add maps – at least indicate on the annexed map the distribution of the species)

- in the country:

- in Europe (especially within the territory to which the directive applies):

- in other parts of the world:

Further comments concerning the geographical distribution:
(e.g. known subspecies/races, regional varieties, loci typici)

Status and estimated population size:
(Indicate the situation in the Member State(s) and as far as possible European wide or world wide)

Reasons for proposal [including justification for placing in Annex V if applicable]:

.................................................................
International Conventions and Instruments:
(Please mark with „x” if mentioned)

<table>
<thead>
<tr>
<th>Bern Convention</th>
<th>CITES Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex 1</td>
<td>Annex 1</td>
</tr>
<tr>
<td>Annex 2</td>
<td>Annex 2</td>
</tr>
<tr>
<td>Annex 3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bonn Convention</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex 1</td>
<td></td>
</tr>
<tr>
<td>Annex 2</td>
<td></td>
</tr>
</tbody>
</table>

Important references / literature / publications:
(especially those relevant for the taxonomy, conservation status and geographical distribution)

Further remarks

Contact Person for additional questions concerning this habitat type:

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postal Address</td>
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</tr>
<tr>
<td>Country</td>
<td>Phone No</td>
</tr>
<tr>
<td>Fax No</td>
<td>E-mail</td>
</tr>
</tbody>
</table>

If not identical with Contact Person, author of this data form:

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<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
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<td>Postal Address</td>
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