BIOITALY: Nature 2000 in Italy

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ABSTRACT: - The Author recalls goals and deadlines of the European Communities Habitats Directive 92/43/EEC (May 21, 1992) and of the Natura 2000 Network. After saying that Italy has up to now only marginally took part in the definition of habitats and species to be included in the Annexes I, II, III and IV of the Habitats Directive, he underlines that only the collaboration between the Italian Botanical Society and the Italian Ministry of Environment - Nature Conservation Service - has allowed Italy to fill the gap with other countries. Furthermore, he relates the on-going progress of Natura 2000 in Italy (Bioitaly Project): about 2700 sites collected, a useful collaboration between botanists, zoologists and ecologists, the constitution of a list of new habitats and species to be included into the Annexes of the Directive. Finally, he wishes a closer working relationship among phytosociologists, botanists and ecologists, in order to avoid the risk of replacing in the CORINE project the phytosociological approach with a less satisfactory physiognomic classification.

KEY WORDS – CORINE programme, Habitat Directive, Bioitaly Project

The Author intends to show what it's doing in Italy about Natura 2000, about the shake-up of the Scientific Communities and about the links between Scientific Communities, Local Administrations and the Nature Conservation Service of the Ministry of the Environment.

The Habitat Directive was issued in 1992 (OJ No L 206/7) and its main goals were:

– to contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies;

– to set up a coherent European ecological network of special areas of conservation under the title Natura 2000 (Figure 1). This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range (Table 1).

In the past, from 1990 and 1993, Italy did not take part in discussions or took part at a very low level. So in Italy the Scientific community was not able to give its opinion on the goals and on which habitats and species should have or should not have been included in Annex I, II, III, and IV.

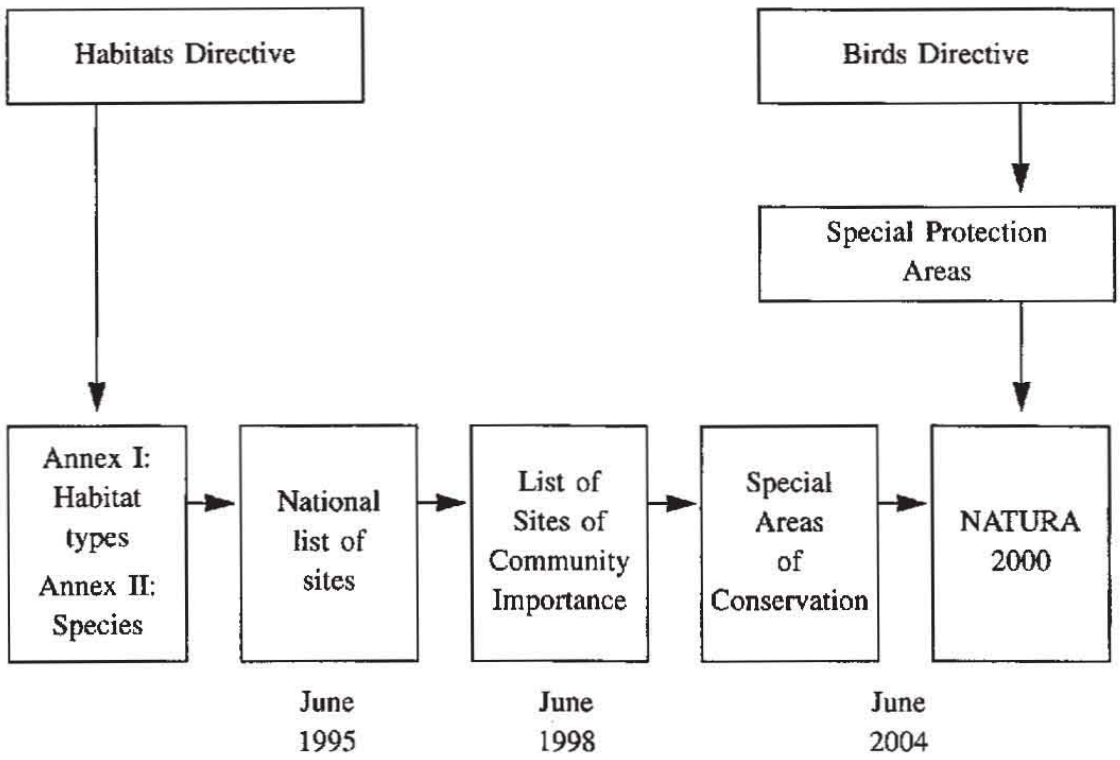

Fig. 1 – The Natura 2000 Network (from: Natura 2000, I, May 1996. Redrawn)

As a consequence, the majority of the endemic Italian species and of the typical Alpine, Apennines and Central Mediterranean habitats were not included in the Annexes of the directive. While all the European Countries were working to achieve the goals of the directive, the Italian researchers knew nothing about it.

As we have seen the main aim of the Habitat Directive is to protect European biodiversity and to define a network with the most significant examples of populations and habitats in terms of biodiversity and ecological importance.

Despite this in 1994 the Italian Nature Conservation Service contacted the Italian Botanical Society and together they defined the Italian programme. The first step was the constitution of the National Scientific Coordination Group composed of botanists, zoologists and one ecologist.

There is also a National Technical Coordination Group with people of the Ministry of the Environment and of the Local Administrations (Regions).

The Italian Botanical Society is working in several ways: both as Groups of co-ordination and at a regional level.

Since 1994 the main part of the activity of phytosociologists and florists has been dedicated to working on the Habitat Directive.

Every region has its botanists, zoologists and ecologists who work together in the nature projects.

TABLE 1
DEADLINES FOR SAC (SPECIAL AREAS OF CONSERVATION) DESIGNATION
(From: Natura 2000, I, May 1996. Redrawn).

DATE	ACTION
May 1992	Council of Ministers adopt Habitats Directive
June 1994	Transposition of Directive into national legislation
June 1995	Submission of: – national list of sites – cost estimates for conservation of sites harbouring priority habitat types and species
June 1995 - June 1998	Selection of Sites of Community Importance (SCI) according to biogeographical region
June 1998	Designation by Member States of SCIs as Special Areas of Conservation (SACs)
June 2004	Completion of the NATURA 2000 NETWORK containing SACs and SPAs
June 2004 onwards	Member States monitor conservation status of habitat types and species for which sites have been designated Commission reviews NATURA 2000 contribution towards achieving the conservation objectives of the Directives

After two years we have closed, or it would be better to say, we are closing the gap with other countries.

Just in time, on the end of December 1995, Italy is handing over the information on 2700 sites of European importance (we are the first or second to do so) (Tables 2 and 3).

This miracle has been made possible because all the Local Administrations have partecipated with their technical, administrative and scientific staff and because about 300 researchers have shared their data and field work experience.

In 1996 the agenda of the Directive Habitat Commission provided the possibility to integrate the Annexes with other species and habitats.

Obviously, the way is more difficult because the European Commission does not intend to change the contents of the Directive too much.

Italy did not take part in these discussions therefore, we should now have to thank our Spanish or French colleagues if in the Annexes several habitats and which are also to be found in our country are included.

It won't be easy, but if the aims of the Directive were to save the biodiversity, the European Commission should accept our proposal.

The Italian Scientific Group has defined a list of 72 habitats (of which 47 have priority) (Appendix 1) and 300 species (of which about 70 have priority). The zoologists group also made a similar list of animals.

It will be very, very difficult to get the European Commission to agree to the Italian proposal. But it would be useful for all the Mediterranean Countries and indeed for all European Countries to have a more complete list.

TABLE 2

Regions/autonomous provinces	Delivery date	Number of sites
Abruzzo	15-06-1995	197
Basilicata	15-06-1995	52
Calabria	21-06-1995	189
Campania	16-06-1995	135
Emilia Romagna	21-06-1995	92
Friuli Venezia Giulia	27-06-1995	61
Lazio	23-06-1995	186
Liguria	12-06-1995	127
Lombardia	20-06-1995	175
Marche	27-06-1995	79
Molise	23-06-1995	126
Piemonte	14-06-1995	167
Puglia	12-06-1995	97
Sardegna	23-06-1995	181
Sicilia	23-06-1995	341
Toscana	19-06-1995	133
Umbria	16-06-1995	85
Valle d'Aosta	14-06-1995	35
Veneto	20-06-1995	156
Bolzano/Alto Adige	26-06-1995	34
Trento	23-06-1995	144
Total		2792

In June 1995, in consideration of the first deadline specified by the Habitat Directive (92/43/EEC), the regional administrations and the administrations of the autonomous provinces have submitted to the European Union an initial list of the areas of EU interest, together with the corresponding cartography. This table, showing the number of sites detected in each region/autonomous province, was updated in August 1995 (From: Intermedium Report, Nature Conservation Service of the Ministry of Environment, 1995).

The Scientific European Communities, the IAVS, the European members of the phytosociologist federation should supervise what is happening in the European Environmental Agency and the new CORINE.

It should be also considered that just a small number of the Scientific Community take part in the European Scientific working Group although now it would be useful to have the presence or, at least, a closer working relationship with phytosociologists, botanists, zoologists and ecologists.

In this time a new CORINE list was defined without the contribution of phytosociologists.

A few months ago a meeting in Paris was held in order to discuss the standards of the new CORINE.

The new Palaearctic habitats classification has already replaced Phytosociology with the typical physiognomic approach.

This was confirmed in the official communication, from the Topic Centre of Nature Conservation (Paris), about the results of the meeting in Paris. The CORINE Biotopes were considered «too phytosociology-defined».

If CORINE was a multidisciplinary project (including biological, physical and

TABLE 3
NATURA BAROMETER (SITUATION AS OF 01.04.1996 ON THE BASIS OF INFORMATION TRANSMITTED OFFICIALLY BY THE MEMBER STATES)
(From: Natura 2000, I, May 1996. Redrawn)

Member State	Birds Directive SPA Classification			Habitats Directive SAC designation (stage I)				
	Number of SPAs	Total area (Km^2)	Progress	National list	Number of sites	Total area (Km^2)	Site maps	Natura 2000 forms
België/Belgique	36	4,313	C	O	–	–	–	–
Danmark	111	9,601	C	L	175	±9,000	N	–
Deutschland	494	8,537	I	O	–	–	–	–
Ellas	26	1,916	O	O	–	–	–	–
España	149	25,338	I	O	–	–	–	–
France	99	7,069	O	O	–	–	–	–
Ireland	75	1,579	I	O	–	–	–	–
Italia	80	3,164	O	P	±2,800	?	–	–
Luxembourg	6	14	O	O	–	–	–	–
Nederland	23	3,276	I	O	–	–	–	–
Österreich	n/a	n/a	O	L	94	±3,620	N	N
Portugal	36	3,323	I	P	30 (Madeira + Azores only)	414	M	N
Suomi	15	n/a	O	L	370	24,726	N	–
Sverige	75	1,460	O	L	563	40,498	N	N
United Kingdom	126	4,396	I	L	211	7,429	N	_

n/a = not available
C = Classification complete; I = incomplete classification
L = Complete national list; P = unfinished national list
M = Avilable maps and forms completed and computerised; N = incomplete maps and forms
SPA = Special Protection Areas
SAC = Special Areas of Conservation

human classification), how can we replace the phytosociological with the physiognomic classification?

European botanists probably do not know the problem.

The discussion on these issues will require a European meeting to be held in cities such as Rome, Lancaster, Paris, Bailleul, etc., because it is absolutely imperative that botanists, phytosociologists and ecologists of the IAVS European federation and National Societies, know what is happening in Europe regarding environmental programmes.

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APPENDIX 1:

List of the 72 habitats proposed by the Italian Scientific Group to integrate the Annex I of the Habitat Directive. The asterisk means priority.

Coastal and halophytic habitats

* Sublittoral Rocky seabeds
* Encrusting algae pavements
* Mediterranean *Cymodocea* beds
* *Halocnemum* scrub vegetation *(Halocnemion strobilacei)*

Mediterranean embryonic shifting dunes

Mediterranean white dunes

* Northern Adriatic dunes with *Hyppophaë rhamnoides*

Non-marine waters

Small pondweed communities *Parvopotamion*

* Sicilian natural eutrophic lakes of *Potametea pectinati*

Waterlily carpets, water chestnut carpets, fringed waterlily carpets

* Algae community from acid environments
* «Limnocrene» karst springs (Emerging water)
* «Reocrene» karst springs (Running water)
* Central mediterranean rivers gravel beds
* Rivulet vegetation on siliceous substrates in the Mediterranean
* Nemoral stream communities of Calabria
* Sicilian floating vegetation of *Ranunculus* of plaine rivers

Scrub and grassland

* Mediterranean and Sub-Mediterranean *Calluna-Genista* heaths
* Madonie *Astragalus* hedgehog-heaths
* *Genista michelii* hedgehog-heats

Peninsular Italian broom fields

* *Genista aetnensis* stands

Sub-Mediterranean deciduous thickets *(Cytision sessilifolii)*

* *Zelkova sicula* matorral

Western *Erica manipuliflora* heath-garrigues

* Sicilian jujube brush
* Eolian broom fields

Spiny spurge garrigues

* *Helichrysum, Santolina, Phagnalon* garrigues
* Eastern dwarf labiate garrigues
* Eastern *Helichrysum* and other composite garrigues
* Supra-Mediterranean box scrub
* Eastern *Salvia* and *Stachys* garrigues

* Sardinian *Centaurea horrida* phryganas
Italian *Thymus capitatus* phryganas
* Sardinian *Satureja thymbra* phryganas
* Italian *Anthyllis* phryganas
* Southern italian mat-grass swards and related communities
Alpine acid snow-patch communities *Salicion herbaceae*
Discontinuous erbaceous formations of the top crests in the Northern Apennines.
* Species-rich *Caltha palustris* sedge communities on siliceous substrates in Mediterranean mountain
* «Biancane» of argillaceous pliocenic areas of Tuscany
Apennine vegetation in badland gullies
* Apennine humide meadows *(Ranunculion velutini)*

Forests

Southern Alpine and Apennine acidophilous beech forests
Southern Alpine and Apennine neutrophile beech forests
* Northern Italian pedunculated oak-birch-wavy hairgrass woods *(Carpino-Quercetum roboris).*
Central and Northern Apennine acidophilous oak forests
Central and Southern Italian *Quercus cerris* and *Quercus pubescens* woods
Central and Southern Italian *Quercus cerris* and *Quercus frainetto* woods
* Central and Northern Apennine sub-montane hop-hornbeam woods
Quercus petraea and *Betula pendula* woods *(Querco-Betuletum)*
* Apennine birch woods
* Mount Etna birch stands
* Southern Apennine silver fir forests
* Relict Nebrodi fir stands
Grey willow scrub *(Salicion cinereae)*
Central Mediterranean mesophilous *Quercus congesta* woodlands
* Deciduous oak woodlands with *Celtis aetnensis (Celtido-Quercetum virgilianae)*
Pre-Alpine *Orno-Ostryon*
* Italian kermes oak woodland and scrub
Central Mediterranean *Quercus virgiliana* woodland

Bogs and marshes

Marestail beds
* Large *Carex* beds
Small reed beds of fast-flowing waters *(Glycerio-Sparganion)*
* Quaking bogs on oligotrophic waters
* Marsh vegetation dominated by Cyperaceae *(Magnocaricion elatae)*

Inland rocks and screes

Apuane Alps screes
* Calcareous Sicilian screes
* Alpine and Apennines limestone pavements
* Etna lava tubes
* Italian Fumaroles