



IUCN Regional Office for Europe

Biodiversity in Forests Survey

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Contents.	Page
 Introduction and background. Previous surveys. Objectives of present survey. Selection of respondents. The questionnaire. 	3 3 3 3 4
 2. Forest Policy. i) Organisations & people. ii) Present policy & responsibilities. iii) Improvements. iv) Selected quotes. 	4 5 6 7
 3. Biodiversity Policy. i) Information & guidance; present state of knowledge. ii) Information & advisory services. iii) Present subjects of advice. iv) Weaknesses. v) Private owner options. 	7 9 9 11 12
4. Management activities.i) Subjects and priorities.	13
5. Finance.i) Existing arrangements.ii) Management requirements.	15 15
6. Other. i) Selected quotes and comments	16 16
7. Conclusions and recommendations.	18
8. Acknowledgements & appendices.	22
 i. Questionnaire ii. Useful contacts in the CEE countries iii. Useful references iv. Latvian Pan European Forest Certification v. Natura 2000, leaflet for Czech Republic 	

vi. Questionnaires' replies

1. Introduction and Background.

IUCN (The World Conservation Union) is interested in developing a programme aimed at promoting the Sustainable Use of Forests in relation to Biodiversity Conservation within Central European, Balkan and Baltic countries. As part of this programme, IUCN has begun to collect, collate and analyse information leading to a substantial project, to help the owners of private forest-land in these countries with the conservation of biodiversity.

At the same time the Forestry Department of FAO, based in Rome, has been developing ideas for a regional project for the strengthening of private and community forestry in selected countries of Central and Eastern Europe. This project has different components from that of IUCN, and focuses mainly on capacity building in state and private forestry services. Its principal targets are participatory forest management, and the creation of appropriate conditions for the establishment of forest owners associations. This work provides a wider context for IUCN and it is planned that IUCN will be a major technical partner for FAO.

1.i. Previous surveys. IUCN began the present initiative on biodiversity conservation on privately owned forest-land in 1999, through 2 workshops (in Tatranska Lomnica, Slovakia and Mallorca, Spain). These were followed in 2000 by a project on *'Nature conservation in private forests of selected CEE countries'*, which was supported financially by the Dutch Ministry of Agriculture, Nature Conservation and Fisheries (LNV). This project used questionnaires completed by experts from selected countries to identify priority issues related to nature conservation in private forests. A workshop/seminar, aimed at sharing the results of the questionnaires, was held in Sekocin/Warsaw, Poland in September 2000. A report, produced in 2001, identified opportunities, constraints and recommendations.

1.ii. Objectives of present survey. The present questionnaire-survey builds on the results and recommendations of previous work. Its primary objective is to provide IUCN with suitable information to develop its own project proposal to improve/support nature conservation in private forests by indicating priorities, needs, approaches and tools, as well as targets. It should also complement the FAO proposal and help to define in more detail the type of inputs that IUCN can bring to it. In particular this survey aims to:-

- Identify gaps and weaknesses in forestry extension material concerning the issues of forest conservation in private forests.
- Identify gaps and weaknesses in communication skills and capacities.
- Make recommendations regarding training materials/programmes for private forest owners.
- Identify priorities for action.

1.iii. Selection of respondents. The 10 countries from the previous IUCN work were included in this survey i.e. Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia and Slovenia. Each country provided 2 respondents, 1 from a State Forest Department or allied organisation and, where possible, 1 from a private forest organisation. The aim behind this was to obtain potentially different views from the state and private sectors of each country. In total 20 questionnaires were circulated. 19 were returned plus an additional 1 from Bulgaria. The replies represented the opinion, knowledge and background of the

individual respondents, some of whom pointed out their subjectivity and provided '*average opinions*'. Several respondents gave extensive helpful comments some of which have been quoted in the appropriate sections of this report. In a few cases the intention of the reply was not clear and has been omitted from the analysis. However these few omissions have not altered the main conclusions to be drawn from the questionnaire replies.

1.iv. The questionnaire. The questionnaire was divided into 5 sections. Section 1 – Forest Policy; Section 2 – Biodiversity Conservation Policy; Section 3 – Management of Private Forests; Section 4 - Financial Assistance; Section 5 – Other comments. (A copy of the draft questionnaire is included in Appendix 1). As far as possible questions were asked to reveal the real, rather than the academic, picture in each country. This was not always successful, partly because of the problems of language and meaning. Therefore supplementary questions were put to each respondent to clarify appropriate points. Almost all respondents replied in a positive and helpful way to these supplementary questions.

The Forestry Policy section of the questionnaire built on the previous IUCN survey but asked more specific questions aimed at identifying important groups and people in forestry policy formulation and practice. Any action, which might be taken as followup to this survey, is likely to involve these organisations and people as major stakeholders and partners in the development of forest extension services. This section also investigated the position of biodiversity policy within forest policy on both state and privately owned land.

The Biodiversity Conservation Policy section investigated the existing knowledge and practice base of state and private forest owners in the field of biodiversity. It also asked about the subjects on which advice is currently given, how it is provided, and what are the main weaknesses.

The Management of Private Forests section investigated the relative importance of advice on a range of forest management subjects to private owners.

The Financial Assistance section sought to provide a general picture of the financial support available to private owners and to what extent it is used.

The Other section provided an opportunity for respondents to make additional comments.

2. Forest Policy.

2.i. Organisations and People. According to the previous survey there are approaching 3 million private forest owners within the 10 EU accession countries. The average size of forest property per owner is somewhat more than 2 ha., with the exception of Slovakia where more than 60% of private forest land belongs to estates larger than 100ha. In identifying the most appropriate and important groups or organisations to be involved in the development of biodiversity conservation policies and practice, all respondents listed statutory forestry and environmental bodies at State, Provincial or local level, together with Institutes or Government Agencies. This reflects the opinion that further development of biodiversity conservation on private forest land must engage the 'major players' in each country.

Most respondents identified private forestry organisations, such as technical forestry expertise bodies and private owner associations as important in any discussion.

However there seems to be considerable variation between countries on the extent to which private forestry associations are able to participate in the development of forestry policy and practice. In some countries (Czech Republic, Estonia, Latvia, Lithuania Romania and Slovakia) private forest owner associations have an important or potentially important role in forest policy; (some of the respondents are officeholders or officials of these organisations). In the others, such associations either do not exist or are in their early stages of development and play only a limited part, either because of their own lack of capacity or the absence of a partnership and a sharing culture. A typical quote is 'As to private forestry organisations there are none of them (as far as I know) which would be involved in the development of biodiversity conservation policies for privately owned forest land.' All respondents identified nature conservation NGOs as potentially important partners, but again their capacity to participate varied between countries. One referred to, 'reliable NGOs'. This simply reflects the large number of NGOs in some countries and their variability. In some cases specific organisations were identified as important. For example in Poland support from the Roman Catholic Church is regarded as vital. In the Czech Republic participation by hunting organisations is necessary because of the impact high populations of herbivores have on forests, 'too many hoofed animals'. It is also necessary to recognise the role to be played by bodies responsible for forest certification in the Baltic States and the role of management planning and forest inspection in most respondents' countries. Despite these reservations extensive and useful lists of organisations and people were provided. These will form the basis of a database which assist in the development of any follow up programme (see annex ii)

2.ii. Present policy & responsibilities. All 10 countries in the survey now have national forest policies or legislation, with strategies and action plans for implementation at varying stages of development. However within these policies biodiversity is never dealt with specifically. It is invariably treated in general terms only. In some cases '*there is no such developed*!'

Nevertheless the non-specific treatment of biodiversity does include useful general principles, such as the 'the preservation and maintenance of current levels of biodiversity', 'preservation of forest habitats and their characteristic species diversity' and 'replication of "natural processes". Several countries identify the forest management practices and policies, which have a positive impact on biodiversity. These include the encouragement of natural regeneration, the enhancement of biodiversity of forest tree species, improvement of the conservation of gene sources within forests, the conservation of old trees and nature-friendly forest technologies. These, and others, go some way towards a framework for the achievement of biodiversity conservation within forests, but there are two particular problems.

Firstly and perhaps understandably, the approach is forestry based and would benefit from the inclusion of additional ecological principles at the strategy and action plan/implementation stage.

Secondly more generalised statements lead to difficulties over details when it comes to implementation. Here again more sensitive biodiversity conservation forest management could be usefully developed.

All countries reported that forest policies were ownership neutral i.e. they applied to both private and publicly owned forest land. This means that biodiversity conservation principles within forests apply equally to both private and public owners. In several countries, Estonia, Latvia and Lithuania, the primary responsibility for implementation of biodiversity conservation policies lies with the private owner, with supervision being provided by statutory bodies at national or provincial level. Often the Forest Management Plan is the mechanism by which supervision and control is carried out, but the success of this in relation to biodiversity conservation is variable. In some cases the system appears to work effectively. For example, '*This system is not theoretical at all. County Environmental official's reception times are filled with private forest owners*'. However in the majority of cases it is less successful. Typical quotes are, '*A policy for supporting direct implementation exists ...but is not really practised*'; '*These objectives (biodiversity principles) require a very difficult and long-term implementation in practice*'. '*Institutions are presently understaffed, underresourced and cannot fulfil their mandate on the ground*'. A further complication is that for various reasons, including the recent cultural heritage, owners are reluctant to use the system. e.g. '*Although the state forest administration provides management guidelines to small-scale forest landowners free, most of them haven't taken it over officially*'.

Some respondents made no reference to the responsibility of private landowners for the implementation of biodiversity conservation on their land. Instead the primary responsibility seems to lie with the appropriate ministry at national level, and may be discharged by regional or local authorities. It is a centralised, top-down approach. This difference in emphasis from a more private owner based approach is an important factor, which should be taken into account when deciding on priorities for the next steps for this work.

2.iii. Improvements. Questions 1.v. and 1.vi. addressed the longer and shorter term improvements in forest policy and practice which respondents felt would be helpful to make. The result was a long list reflecting the needs in different countries. Subjects for longer term consideration were:-

Training for private forest owners and foresters;

Technical forest management manuals;

Forest certification systems;

Clear national policies;

Education programmes; (These were not clearly defined).

Forest income diversification;

Compensatory/financial measures;

Information to private owners;

Owner contact & forest extension services to private owners;

Overgrazing by herbivores;

An inventory/database of owners and forests;

Collaboration among forest owners;

Encouragement of a 'voluntary approach';

Formulation of requirements for productive & non-productive forests;

Better owner involvement in management plan preparation.

Several of these ideas overlap. A more detailed survey, which investigated definitions of some of the terms, might find that some are similar in the minds of the respondents. The 3 most widely supported categories were:-

- the provision of information about biodiversity to private owners,
- the establishment of an extension service, which would provide better contact with owners
- the provision of improved financial and compensation arrangements to forest owners.

Following these 3 was the provision of better training programmes and materials, such as technical manuals.

Many of the respondents identified immediate improvements that were similar to their longer-term replies. In Slovenia, technical issues like the immediate designation of forests or individual trees were suggested, while in Bulgaria, the importance of biodiversity to national policy and life was emphasised. Between these 2 extremes the most widely supported categories were similar to the longer-term improvements. These were:-

- training for private forest owners,.
- the provision of better, accessible and understandable information.
- forest finance and certification.

Several respondents commented on the way these immediate improvements might be addressed, such as the provision of 1-day workshops, which are locally organised, and the promotion of a 'voluntary approach' among owners, which recognises their partnership with statutory authorities.

2.iv. Selected quotes of suggested improvements.

a. 'To improve information exchange among state institutions involved in nature conservation'.

b. Only voluntary commitment of owners, which can be realised through certification'.

c. 'First of all the meaning of protection should be transferred from forbid to do any activities (or at least restrict heavily)... to practice of conservation.....'

d. 'The most important is to arrange associations of private forest owners. If we want more effectively to introduce sustainable environmental management, we must try to concentrate in one organisation as many owners of private forests as possible (on a local level first).'

e. 'A significant area of forests which are not presently included in a protected area network, but which exert certain protection functions (soil, watershed, climate etc.) are going to be restituted. Some of them might have high biodiversity value.'

f. '*I think the most important is to improve the awareness (by extension) of non-state forest owners*...'

g. 'More active participation of county and regional offices of state forestry administration in PR activities, dissemination of information and extension'. h. 'I can't remember any special contact between departments of the Ministry of Environment and a single forest owner in my area according to maintain biotic diversity'.

3. Biodiversity Policy.

3.i. Information & guidance; present state of knowledge.

Questions 2.i.and 2.ii. were designed to find out the need for information about European biodiversity policies among forest organisations (State & Private) and private forest owners.

In those countries which are immersed in the harmonisation process prior to EU accession such as Poland, Czech Republic and the Baltic States, information on European biodiversity policies seems to be good or developing rapidly, due to projects designed to establish an appropriate site network and suitable management. *'The state forestry organisations are generally well informed on EU biodiversity*

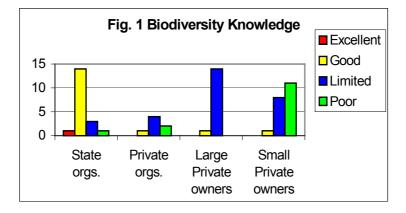
policies'. This overall picture is complicated however by the lack of communication between ministries and between central and local staff. 'There are difficulties in distributing/disseminating the information at regional level and guiding various organisations of the forestry sector in how these policies should be implemented'. Furthermore, communication between ministries and private forest organisations is variable. 'The system of dissemination is missing'; 'The knowledge level of private forest organisations about Natura 2000 programme is very low. This time they are asking for no information'; 'The situation is far from perfect, especially in the private sector where organisational structures are building their capacity from zero with particularly no support from the government'.

Several respondents stressed the need for information in simple, understandable language. This applied to both organisations and private forest owners.

Although in some countries forest-related organisations appear to have sufficient information about European biodiversity policies, for many this is not the case. In those countries further from EU accession like Bulgaria, Romania and possibly Slovakia, any information would be an advance.

Among private owners there is a general need for more information particularly about the 'restrictions' and financial and management implications of biodiversity policies. Where programmes of establishing Natura 2000 networks are proceeding, owners of forest land become aware of these issues when they are faced with the designation of their land. But the need to provide owners with information in accessible form was referred to frequently and occasionally related to wider issues. '*The main term/mark in providing the information must be transparency. Every single forest owner must have access to the information that could have impact on his/her rights and duties ...'*

Questions 2.ii.and 2.iv.were designed to find out about the existing knowledge of the abundance and extent of animals and plants on forest land among forest organisations (State and private) and private owners. Fig.1 summarises the replies:-



Among state organisations knowledge is generally good, though in some countries it is less so. Moreover knowledge is not evenly distributed. For example knowledge in relation to game and large animals may be good, but details on other groups of animals and plants may be sparse. Data on private forest organisations is limited because there are fewer such organisations. Among private owners knowledge is either limited or poor, with larger owners being better informed than smaller. In only 2 cases was the knowledge considered to be good. However one interesting comment was made, *'Private owners have a 'natural' knowledge based on family tradition and* their own observations. They know more or less about species and their soil and water requirements. "Biodiversity", "Habitat" –it usually sound unfamiliar for them'.

3.ii. Information & advisory services.

Questions 2.v.and 2.vi.were designed to find out where, if anywhere, forest organisations and private owners obtain information about the presence and abundance of plants and animals. Replies identified sources and availability of information, but also suggested that private owners rarely used them, partly because in several countries there is no legal requirement for them to do so. In one case the answer was '*There aren't any*', though this was contradicted by another respondent from the same country. Lack of owner interest applied even in those countries where there are national inventories or databases. '*In principle forest owners have access to the information but the information is fragmented and dispersed between different state authorities*'.

Forest organisations generally tend to obtain their information from a similar range of sources, Institutes, Agencies, Universities/Academics and nature conservation NGOs. Private owners have access to the same sources, at least in theory, but in practice depend a great deal on the inclusion within their Forest Management Plan of details of the plants and animals that occur within their forests. In this respect the Forest Management Institutes and services they provide to private landowners are particularly important as ways of communicating biodiversity information and principles.

Questions 2.vii.and 2.viii.asked who provides biodiversity advice to private owners at present and what opinions respondents have about who should provide such advice in the future.

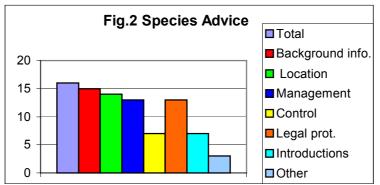
In the majority of countries the responsibility for providing biodiversity advice lies with state authorities either through the forest service or local authorities, with additional advice being given by university 'experts' and nature conservation NGOs. Sometimes e.g. Bulgaria, advice from state authorities is notable by its absence, even though there is a legal responsibility to provide it. In Poland, Romania, Slovakia and Slovenia advice is limited because of lack of budgets, lack of professional expertise among the few advisors and demand on their time outstrips what is available. Respondents from these countries had clear ideas of the kind of advisory service that is required and the range of organisations (public and private) which should be involved. In the Baltic States advice is often provided by an extension service, which is part of private owner associations, or forest institutes, which deal with inventories and management plans.

For the future many respondents saw the need for forest extension advisory services operating from either private owner associations or state authorities. Some typical quotes are:- *'Private forest extension services provided by forest owners associations distributed locally and easily available to forest owners'*. *'Brief answer is:- Accredited consultants with background in forest sustainable management and forest biodiversity'*. *'According to the draft plan, acting in co-operation with local forest*.

owners associations, is seen as central co-ordinator of the advising of woodland owners'. 'Always a concrete person who is ready to be consultant of forest owner (permanent)'. Some, Estonia and Lithuania, suggested that the development of certification standards as a useful way of making advice available. Overall the impression is that respondents mostly saw the value of developing advisory services, though the direction of their development depended on the stage each country had reached in its social and economic development.

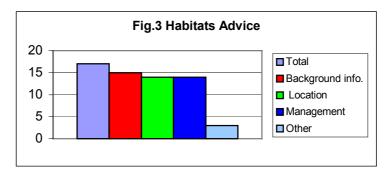
3.iii. Present subjects of advice.

Having established the sources of information and the present and future sources of advice, the series of questions in 2.ix. and 2 x. investigated the subjects on which advice is sought and given, and the method(s) of providing that advice. Fig.2 summarises the advice on species.



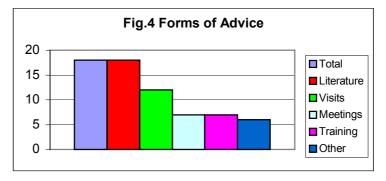
The main conclusions to be drawn from these replies is that background information, location, management and legal requirements of species are the subjects of most advice. Introductions and species control are less important.

Figure 3 summarises the advice on habitats.



There is little to choose between the subjects of habitat advice.

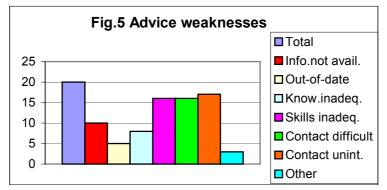
Figure 4 summarises the methods by which advice is provided. Respondents were asked, sometimes with supplementary questions, to be as specific as possible over the methods used, for example the titles of any literature or the frequency and subject of workshops.



By far the most frequent method of giving advice was the use of literature. The range of publications varied widely from general academic accounts of biodiversity to leaflets covering specific subjects like Natura 2000. It was not clear whether any of the literature was targeted to meet the needs of any particular group, such as private forest owners. This should be a priority issue in any further development of this work. Significantly, meetings and training events were the least used yet several respondents commented on the value of face-to-face contact.

3.iv. Weaknesses.

Questions 2.xi. and 2.xii.aimed to identify weaknesses or difficulties in the advice provided to private landowners and, if possible the organisations involved. Fig.5 summarises the replies on the types of weaknesses.



The largest category of weaknesses is that owners are not interested in biodiversity conservation and issues related to it. While there may be a few, usually large forest owners, to whom this dos not apply, most small owners are more concerned with more immediate problems. Closely behind the 'lack-of-interest' category are the difficulties of contacting private owners, particularly the large number of small owners, and the lack of communication skills among the organisations responsible for these contacts. The lack of up-to-date knowledge about biodiversity and the policies associated with it, are not regarded as such a serious problem, though this masks variation among the ten countries. For example some regarded all of the weakness as equally important, while others were more selective. This is likely to reflect the different situations within the ten countries and confirms comments made in reply to previous questions. The weaknesses in owner contact/interest and communication skills have important implications for future programmes.

These weakness and difficulties apply to a wide range of organisations. Almost all respondents identified weaknesses in knowledge and skills among statutory bodies at state provincial and local levels. These include agencies responsible for forest and nature conservation. Respondents also identified weaknesses/difficulties among private owners and forest owner associations where they exist. A typical quote is,

'Generally "guilty" are mainly the forest owners. Problems with reaching target audience is a common phenomenon. The other problems are on the side of the communicators.'

Although the replies on organisational weakness are generally similar the replies fall into 3 groups, structural difficulties, the lack of communication skills and training and the style of communication.

Structural difficulties relate to the lack of ownership databases complicated by suspicion of 'co-operatives' and the average age of small private forest owners. Even where they exist forest owner associations have problems in contacting and

interesting forest owners. One respondent stated, 'We have the "national umbrella" but it seems to me that there is nobody under it.'

Lack of communication skills is widespread, as is a general misunderstanding of what communication is and how it can assist in helping to solve biodiversity conservation problems. Development of capacity in this field is a high priority.

Various comments were made about the style of communication including the language used (the need for simple translations of already existing literature was referred to), and the bureaucracy involved in dealing with state authority administrations.

3.v. Private owner options.

Questions 2.xiii. and 2.xiv. sought to identify what actions and co-operative initiatives private owners might be able to undertake immediately. Some countries (Bulgaria, Hungary and partly Romania) made no reply, because the subject is '*still not part of the private forest owners agenda*'. Among the others there were several interesting and imaginative suggestions, though many of these recognised the difficulty of implementation. The Czech Republic, Estonia and Lithuania commented that owners could begin to implement sustainable forest management principles, which include biodiversity conservation. This covers the timing of forest practice and the use of appropriate forest management techniques. Slovakia, Poland and the Czech Republic suggested full implementation of Forest Management Plans, including their biodiversity elements.

Other individual ideas were:-

- The development of training and exchange visits with related organisations in EU countries. (Bulgaria based on their experience with the German-Bulgarian and Swiss-Bulgarian projects.)
- Joint private owner action to provide information and awareness programmes and training and promotion of biodiversity in the forestry press. (Czech Republic and Lithuania).
- The development of private forest inventory programmes and evaluation. (Poland).

On the question of sources of assistance most respondents referred to state or regional forest services, but several suggested, with varying degrees of enthusiasm, the use of private owner associations and extension services. (Estonia, Lithuania, Slovakia and Slovenia). Attached to this category were the ideas of sharing experience of problems e.g. over control of herbivores (ungulates) damaging forests and group certification of forests which reduces costs. 'As certification supports biodiversity, the co-operation in the field of certification can be considered as the joint work of forest owners to embrace the biodiversity'.

One of the main ideas for owner co-operation was the formation or development of owners associations. The need to 'come together' was recognised in Romania, Czech Republic, Estonia, Latvia, Lithuania, Poland, Slovakia and Slovenia. 'But for effective co-operation is necessary to create associations of private forest-land owners'. However a cautionary note was sounded, 'They (private owners) usually answer that it is not necessary. It results from a feeling of ownership and reluctance to common forms of management'. 'The historical background has led to the situation that private forest owners are not eager to co-operative work, not yet'. 'Forest owners can come together only in forest business, and not always, but they are ready to be certified and to follow restrictions separately'.

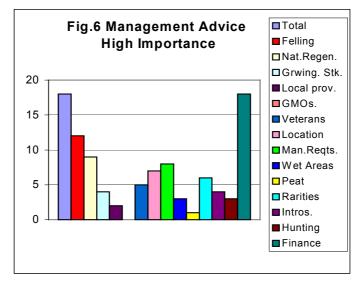
4. Management activities.

4.i. Subjects and priorities.

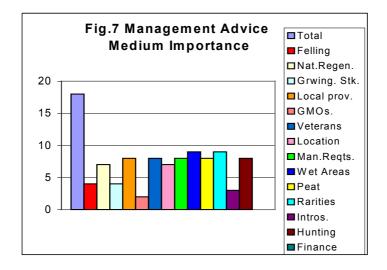
This part of the questionnaire was designed to find out the relative importance that respondents felt that private landowners give to a range of forest management activities. The management categories were:-

- a. Felling and thinning programmes/standards.
- b. Natural regeneration planting programmes/standards.
- c. Sources of EU approved growing stock meeting biodiversity requirements.
- d. Sources of growing stock of local provenance.
- e. Clarification of regulations on Genetically Modified Organisms.
- f. Retention of old (veteran) trees.
- g. Identification and location of habitats and species of biodiversity importance.
- h. Identification of management required by habitats and species of biodiversity importance.
- i. Management of wet areas and streams within forest-lands.
- j. Management of peat and swamp areas within forest-lands.
- k. Protection measures for rare animals and plants.
- 1. Control and introduction of exotic species.
- m. Arrangements for sustainable hunting.
- n. Sources of financial assistance.

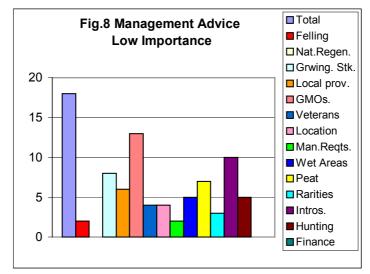
For ease of presentation, the three categories of importance – High, Medium and Low - are presented in separate charts as shown in Figures 6, 7 and 8.



The replies clearly indicate that in every country there is a need for advice on the financial implications and opportunities related to biodiversity conservation. After finance the two most important categories were felling and thinning programmes and natural regeneration. These are both forest management activities and their identification relates to the need for any future work to be forestry based or orientated. The least important category, with no returns, was advice of Genetically Modified Organisms.



In line with the replies on the most important subjects for management advice, several categories were of medium importance. These related to the location of habitats and rare species and their management requirements. These included veteran trees and hunting as well as management of wetlands and peat areas within forests. There seemed little concern about advice on the control of introductions and exotic species, even though this is known as a subject of concern among biodiversity conservationists. It does however fit with the lack of importance given to sources of growing stock.



The low importance categories confirm the overall picture given by the two other categories i.e. that Genetically Modified Organisms and Control of Introductions are the least important subjects for management advice. This overall picture of importance is potentially useful in targeting future programmes and setting priorities. Because the overall picture masks local variations, further detailed discussion will be required before any final decision is made.

5. Finance.

5.i. Existing arrangements.

Questions 4.i and 4.ii. asked about the existing availability and use of financial support to private owners of forest land. The questions did not differentiate between support for forest management activities and biodiversity conservation. However, most respondents listed a good range of work for which financial assistance is available.

In three countries (Bulgaria, Latvia and Lithuania) there is no financial support for private forest activities. '*No funding available*' and '*There is no direct financial assistance*' are typical quotes. This situation may only be temporary, after a recent deterioration as a result of national financial difficulties.

The Czech Republic, Estonia, Hungary, Poland, Romania, Slovakia and Slovenia have some funds available to support private forest owners, though the levels of finance are low. In most cases these are administered through Ministries of Agriculture (for forestry) and Ministries of Environment (for biodiversity). In Poland a range of sources of funds are available at slightly higher levels, though even here they are considered to be too low to satisfy the potential demand. The range of subjects for which the limited financial support is available are mostly related to forest management practices such as afforestation/replanting and stand structure (Hungary), felling and thinning programmes (Estonia), and protection against damaging insects (Poland). Support for the production of 'simplified management plans' is available is most countries. In Slovenia '*compensation for reduced yields*' can receive financial support. This may be useful experience to share with other countries given the widespread importance attached to this subject.

Financial support for biodiversity is mostly lower than for forest management practices and more difficult to access. In the Czech Republic support is available from the National Protection Fund for species of biodiversity importance within forests. Several other countries mention similar arrangements, but comment that the actual use of them by private forest owners is very small.

Some respondents stated that the funds available are fully used (Poland, Romania and Slovakia) but all stated that funding was too low. The reasons given for the lack of fuller use of available funds were of interest:-

- Poor flow of information about the availability of financial support.
- Bureaucracy and the difficulties for private owners of knowing how to 'manage the system'.
- Difficulties in knowing how to complete application forms. '*All procedures for financial assistance are too complicated for ordinary people*'.
- Levels of financial support are too low to interest private forest owners.

5.ii. Management requirements.

Questions 4.iii. and 4.iv. tried to clarify the issues for which private forest owners are likely to require financial support in future, and the potential levels of that support. There was widespread support (Czech Republic, Latvia, Lithuania, Romania, Slovakia and Slovenia) for the need for financial support to compensate for 'restrictions' or additional costs resulting from biodiversity conservation. Similarly most respondents recognised the need for finance to support the training of private owners and forest managers on a range of forest management activities and practices. Bulgaria and Poland specifically mentioned the need for increased funding to support the completion of programmes for the production of 'simplified management plans'. In an addition to these widely supported suggestions there were several interesting and imaginative ideas arising from experience within individual countries. Latvia and Lithuania suggested that development of the PEFC (Pan European Forest Certification scheme)¹ would be a useful area for increased expenditure. Poland identified the need for financial support for land consolidation schemes and large-scale afforestation of abandoned agricultural land. Bulgaria, Lithuanian and Poland proposed that increased finance should be available for work on biodiversity inventories and private forest owner data-bases. The Czech Republic raised the need for financial support for control of high populations of game species.

These more specific suggestions draw attention to ways of promoting strategic and long-term developments within the field of private forestry through increased funding. Several respondents found it impossible to comment on the levels required to fund these issues. Some simply stated that all management related to biodiversity conservation needed support. Others pointed out that funding should be addressed before new schemes were introduced. However despite the difficulties some respondents were able to give an indication of the levels of funding considered to be necessary. All of these respondents qualified their statements with comments that the levels were a minimum. In Slovenia around 5 million Euros/year are spent on support for private forestry with another 3 million needed to meet biodiversity requirements. In Slovakia to total calculated requirement to meet all private forest needs is 18.5 million Euros. In Romania the figure for 'biodiversity assessments and raising owner awareness' is 3 million Euros. In Poland '*the yearly needs reach about \$4.9 million for supervision and management plans only*'.

The general conclusion on the level of funding that will be needed is that at this stage figures are difficult to quantify, but in terms of the countries involved, are substantial and are likely to increase. Several countries laid stress on the hope of financial support from EU programmes such as SAPARD and PHARE.

6. Other

This final section provided an opportunity for respondents to volunteer additional information or opinions on the general subject of the development of biodiversity conservation within privately owned forests in their countries. Although a number made no comment several expanded helpfully on statements which they had already made. Replies, naturally, reflected the situation in each country and emphasised the differences between countries. Thus in Bulgaria active private forestry is rudimentary for several reasons including the fragmentation and small size of forest ownerships, the loss of tradition in forest management and the separation of forest owners from their forests. In contrast countries like Estonia are much more advanced. There the replies stressed the importance of high level political support and the participation of owners and owner associations in the development of forest biodiversity policies. Another contrast appears to lie in the recognition of the importance of private forest-land for biodiversity. In Hungary because only 15% of forest land within protected areas is privately owned, *'private forests aren't in the middle of ministerial interest'*. On the other hand the Czech Republic, Poland and Romania stressed the importance

¹ A copy/reference to the Latvian PEFC scheme is included at Appendix 2

of recognising the value of biodiversity in privately owned forests and the need for an integrated approach. 'We can find in the non-public forests of Poland more areas and objects interesting from the biodiversity point of view than it appears on the first sight and than it is commonly supposed'.

Some replies raised major long-term issues. Poland identified the relationship of private forest management with wider socio-economic issues such as attitudes and local social structures, and the contribution that the education system can make. The implication of this is that the associated changes are likely to be very long term. '*The changes are not possible without restructuring of the village, but it is a very difficult and long-term process. Biodiversity conservation seems to be a secondary problem in these conditions but it should be done, even "in the meantime", when they will be successively solved*'.

Although most respondents seemed to understand the long-term nature of the changes that are required to produce effective biodiversity conservation in privately owned forests, several made positive suggestions about priorities for early action. These underlined points they had made earlier in their replies.

Estonia and Lithuania both emphasised the importance of good involvement of private owners and owner associations in processes of development of policy and practice. 'There is one guideline that has to be followed always when preparing the measures for biodiversity protection: the landowners' interests must be considered from the very beginning'. This was touched on in the Czech Republic replies, which referred to the need to exchange experience particularly over financial matters and compensation.

Estonia also emphasised the importance of the flow of information to private owners. Several replies recognised that, because of the size of the problem and the long-term nature of its solution, it would be better to proceed on a trial basis with lessons learned an improvements incorporated 'on the way'.

6.i. Selected quotes and comments.

a. 'A key biotope is an area of commercial forest which needs protection and where the probability of occurrence of an endangered, vulnerable or rare species is high'.
b. 'Foreseeing the measures how to implement the compensation is very desired, but also the ways how to inform forest owners about planned restrictions and how the forest owners will be advised about the biodiversity protection rules, must be foreseen already at the initial phase'.

c. 'The principal issue seems to be the development of functioning system of information transfer towards the private forest owners'.

d. 'Conclusion: we should search the biodiversity in the other parts of private forests. Their evaluation and inventory of the objects most valuable for biodiversity would be useful on the beginning even on limited areas'.

7. Conclusions.

The FAO objective of strengthening private and community forestry in Central and Eastern Europe and the IUCN aim of promoting the sustainable use of forests in relation to biodiversity conservation, are major undertakings. They are not likely to be achieved through short-term, 'hit-and-run' projects, though each project can contribute to the long-term objective. Individual projects related to sustainable forestry within any of the 10 countries in the present survey could be of most use if they are part of a co-ordinated approach to integrated forestry. Together with its more comprehensive predecessors, this survey demonstrates that there are widespread differences in forestry knowledge and expertise within the 10 countries. Moreover forestry is clearly part of bigger political, economic and social issues within each national picture. This suggests that in any future development IUCN needs to see its work as a contributor to, and a beneficiary of, a wider picture.

The very large numbers of small private land owners constitutes a major problem for programmes and projects aimed at 'improving things'. Most of these owners have lost the traditional knowledge of forest management, they often live away from their small forests and they are mostly older people who are suspicious of associations because of the connotations they have from former times. Usually there is no record of who these owners are and they are difficult to contact. One of the results of this is that land consolidation programmes aimed at increasing the size of the forest ownership areas are likely to be slow to take effect. In this survey most respondents said that the majority of private land owners are not interested in biodiversity conservation even where they can understand what the term means! This suggests that future programmes need to be prioritised and piloted, so that lessons learned can be applied to later stages of projects.

Although it is still small, there seems to be a growing recognition of the likely importance of private forest land for biodiversity in each country, and internationally. Protected Areas will not meet national objectives for biodiversity conservation on their own. Private forest land outside protected areas needs to be managed sustainably to maintain national biodiversities. However this view is not shared, or even contemplated, by the vast majority of small private land owners and, because of that, biodiversity conservation outside Protected Areas is sometimes a low political priority. This may change as the implications of the European Union Directives on Habitats and Species become more urgent as the accession process develops. In those countries which are fairly well advanced in this process, there are signs of recognition as the replies to the questionnaires showed.

This survey confirmed what is already widely known from previous work and other areas of activity, namely that each country is different from the others. However it is possible, and useful, to group countries together in terms of their stage of development, their needs and the priorities and targets within them. This does not mean that a single programme or project would solve the problems of all of the countries in each group. On the contrary, individual country differences mean that each country needs to be helped to find appropriate solutions to its needs. This indicates that whatever tentative conclusions may be drawn from this survey, further work and discussion will be necessary with each country to identify and agree their needs more precisely. Nevertheless there are some common factors, sometimes over all 10 countries. For example the need for information about the European Union Directives e.g. Natura 2000, and their implications for private forest owners is universal throughout all 10.

Three possible groupings emerge from the survey, the Baltic States, Central European States and the Balkan States. Programmes based on the stage of development each of these three groups has reached would be a natural 'next step'.

In the Baltic States legislation, policy and, to some degree, practice, are in place. Processes for implementation are developing and a structure for forest extension services is envisaged. Private forest associations are active and partnerships with NGOs are encouraged albeit in a limited fashion. What seems to be needed is the development of specific programmes for the implementation of practicalities, such as the inclusion of biodiversity in Management Plans and Forest Certification schemes and finance issues. Of particular importance is the development of skills and capacities related to communication and the provision of effective information systems.

In the Central European countries, although information and knowledge about biodiversity is available within the nature conservation 'community', it has had only limited impact on forestry. Private owner associations are in their infancy, if they exist, though there is recognition that they could be of benefit. The needs in these countries are to involve forestry, especially private forestry, in biodiversity conservation. Communication between the nature conservation and forestry communities needs to begin at Ministry and national level, and as with the earlier group, must include the development of skills and capacities among those working in both fields. Given the numbers of private forest owners in these countries' pilot projects designed to establish and give credibility to private owner associations, should be a priority. These projects need to be implemented in partnership with statutory bodies and NGOs but be forestry orientated in the first instance. In the Balkan Sates effective implementation of legislation and policy is rudimentary. Although the value of private forest owner associations is recognised, much work needs to be done to make them a reality. Work needs to be concentrated on Ministry staffs dealing with biodiversity and forestry. This needs to include understanding of the requirements of EU Directives and their implications for forestry, both private and state. As with the other 2 groups, building of staff competency in communication is vital, but needs to be set within a 'culture' which enables rather than controls. This represents a major challenge to these countries.

It would also be useful if a sense of shared experience could be developed between these 3 groups so that what works or does not work for one could be considered and, where suitable, be used by others. Such a forum could also be used for the introduction of experience from countries within the European Union. Several respondents identified the potential benefits of such partnerships.

Any future work needs to take account of the concern about financial incentives. The feeling that any constraint or restriction on 'economic forest practice' should be compensated is widespread. Yet compensation arrangements in other countries have been shown to present major difficulties in the longer term. Rather, ways might be sought of providing appropriate financial incentives for private owners to manage their forests sustainably. The Pan European Forest Certification scheme (PEFC) and

the process of producing approved and simple management plans² are two possible ways of tackling this problem.

Whatever programmes or projects that are developed, it is likely that the issue of finance will be raised.

This survey has shown that communication is a major concern among all the respondents. The importance of direct, simple, understandable and transparent communication with private forest owners and associations was stressed. Participative communication skills necessary to win the support of private owners, are lacking, even when adequate information about European Directives and biodiversity is available.

So information held within Ministries of Environment is not communicated effectively to other ministries or to provincial or local governments and rarely to private forest owners. Where there are exceptions to this 'rule' participation by private owners and their associations is welcomed and has a positive effect. Any future work needs to be based firmly on forestry and be problem-solving in its approach. Biodiversity conservation should be built into training programmes for all who are involved in the management of privately owned forests. These programmes should be developed with the positive support and involvement of the 'main players' in each country as identified in the questionnaires. Generally these were Ministries/Agencies, NGOs and private owners/associations. The respondents themselves represent a core of expertise and authority, which should be drawn on any next phase. One of the difficulties will be preconceived ideas about the nature of communication and the means by which it achieves its objectives. To overcome this will require preparatory work with senior people among the 'main players'. This means that future programmes or projects need to start with them.

The questionnaire sought to identify strengths, weaknesses, opportunities and threats. The replies provided a strong base from which to make positive recommendations for future action.

Recommendations.

1. Future work by IUCN in this field should seek to integrate with development of sustainable forestry programmes and projects supported by FAO and EU countries e.g. Germany, Switzerland, Netherlands, Denmark and Sweden. A forum in which progress on country programmes can be shared could be helpful in obtaining more cost effective results and avoid duplication.

2. Biodiversity conservation should be built more fully into country systems for the development of Forest Management Plans and any training programmes for forest extension services.

3. The materials, which are used to promote biodiversity conservation, need to be simple, understandable and readily available to target audiences. These materials should be appropriate to the target groups and need not always be in literature or leaflet form. Appropriate communication methods need to be used e.g. the involvement of private owners and local communities in surveys of the biodiversity of their land, possibly starting with common species which are esteemed locally. To be

² In simplified forest management plans for private forests, site-soil conditions are assessed not researched, forest descriptions are shorter, more general and contain fewer taxation elements. Forest harvesting details are more limited and simple

most effective suitable extension materials should be identified in partnership with representatives of the target groups. Such partnerships themselves have a beneficial 'spin-off' for communication.

4. Throughout the 10 countries there is a need for literature which explains to private landowners the importance of 'biodiversity' and the implications of the European Union Directives. Such information is already available in suitable form in some countries e.g. Czech Republic and Slovakia, and could be translated relatively cheaply. On its own this literature will not be sufficient to communicate effectively with private forest owners. It needs to be part of a communication programme, which not only provides information but also improves the communication capacities and skills of the staff of 'the main players'. Several respondents to this survey said that the most effective communication was from locally based foresters who are known and trusted. These people require the kind of materials already mentioned.

5. Communication capacities and skills urgently need developing. This was recognised by most respondents and should begin with those staff of Ministries, agencies, institutes and NGOs who deal with forest land. This need applies to all 10 countries, but is a priority in the Baltic States where, legislation, policy and forest practises are relatively advanced. The development of these capacities faces the difficulty of widespread misunderstanding of communication and what it can achieve in relation to biodiversity conservation. Communication needs to be seen as a basic competency among those staff whose role it is to provide extension services to private forest owners and among the staff of statutory bodies with forestry and biodiversity responsibilities.

6. In Central European and Balkan States assistance is required in the development of associations of private owners and forest extension services. Because of the size of the private forest ownership, pilot projects would be sensible in order to discover what works and what does not. Private owners or associations need assistance in knowing how to apply for financial support and how to manage bureaucracies.

7. A series of workshops should be aimed at identifying training materials which can be used among staff involved in forestry policy and practice within each country or within the three groups. Respondents to the present survey could usefully be participants in these workshops. They need to address how biodiversity conservation can be incorporated practically into forest management.

8. Examples of how financial incentives work in different EU countries should be assembled to provide a wider insight among private forest owners of what happens elsewhere in Europe. This may be of assistance in facing the compensation for restrictions issue.

9. Private owners need advice on the location, management and legal protection of species and habitats of biodiversity significance. The materials and methods of communicating this advice to them depend on the stage each country has reached in its development. Both materials and methods will be more effectively identified in partnership with representative of the target stakeholder groups. This would probably be more effective of piloted in up to three countries, one from each of the groups.

8. Acknowledgements and Appendices. The authors wish to acknowledge and warmly thank all of the respondents for the time and effort they have given to the completion of their replies. This was particularly so in the light of the thoroughness of the replies in the relatively short time available to them to respond. The replies are an important source of information for use in future work. We thank the following:-

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IUCN European Regional Office

IUCN Forestry Project (2002)

Biodiversity in Forests Questionnaire; February 2002

Introduction. IUCN (The World Conservation Union is developing a programme aimed at promoting the Sustainable Use of Forests in relation to Biodiversity Conservation. As part of this programme, IUCN has begun to collect and collate information, which we hope may lead to a substantial project, to help the owners of private forest-land with the conservation of biodiversity. You may have already completed an earlier, preliminary questionnaire for which we thank you. This questionnaire is a more detailed development of the information collection process. We are grateful to you for agreeing to accept a copy of the questionnaire and to complete the various sections. Please complete these sections as fully and specifically as you can. All the questionnaires will be considered as **totally confidential**. A report summarising the results of the questionnaires is planned for the end of March and a copy will be sent to you.

If you need further guidance on any points feel free to contact E.T. Idle at edward.idle@virgin.net

Please provide the following information about yourself:-

Country

Name	Occupation/Job
Position	-
Address (Work)	
Telephone	Fax
E-mail	
Employing organisation	
Date of completion of questionnaire	

Where necessary please place a X in the appropriate box. Cross several boxes if they apply.

1. Forest Policy.

- i. Which are the most appropriate and important groups or organisations to be involved in any discussion or work on the development of biodiversity conservation policies for privately owned forest-land? (Please give names and addresses).
- ii. Who are the most appropriate and important individuals to be involved in any discussion or work on the development of biodiversity conservation policies for privately owned forest-land? (Please give names, addresses and position in organisation).
- iii. What specific elements/aspects of biodiversity conservation on privately owned forest-land are already included in National Forest policy?
- iv. What specific subjects would it be helpful to include in National Forest policy to assist private owners to manage their forests more effectively for biodiversity? (Please do not include comments on finance at this stage).
- v. In your country, who has responsibility for the conservation of biodiversity on privately owned forest land and in what ways are these responsibilities carried out?

vi. What are the most useful improvements that could be made immediately to produce more effective biodiversity conservation in privately owned forest-land?

2. Biodiversity Conservation Policy.

- i. What information and guidance do forestry organisations (State and private) require on the implications of biodiversity policies of the European Union e.g. Habitats Directive (Natura 2000) and Birds Directive (Special Protection Areas)?
- ii. What information and guidance do private forest-land owners need on the implications of biodiversity policies of the European Union e.g. Habitats Directive (Natura 2000) and Birds Directive (Special Protection Areas)?
- iii. What is the present state of knowledge in forest organisations (State & private) about the abundance and extent of habitats, animals and plants on forest land? Please X the appropriate box.

Excellent	Good	Limited	Poor	

iv. What is the present state of knowledge among private owners of forestland about the abundance and extent of habitats, animals and plants on their land? Please X the appropriate box.

Excellent Good Limited Poor

v. What sources e.g. universities, forest institutes, NGOs, private forestry services, do forestry organisations (State and private) use to find out about the abundance and extent of habitats, animals and plants on their land?

- vi. What sources e.g. universities forest institutes, NGOs, private forestry services, do private forest-land owners use to find out about the about the abundance and extent of habitats, animals and plants on their land?
- vii. Who/which organisation provides advice on biodiversity conservation to private forest-land owners at present?
- viii. Who **should** provide advice on biodiversity conservation to private forest-land owners?
- ix. Where advice is provided, what type(s) of advice is/are provided?

(a) Species

a. Background information	a.
b. Location of important species	b.
c. Management requirements for species	c.
d. Control measures for some species	d.
e. Legal protection of species	e.
f. Introduction of species	f.
g. Other (Please specify)	g.

(b) Habitats

a. Background information	a.
b. Location of important habitats	b .
c. Management requirements for habitats	c .

x. Where advice is provided, in what form is it given? (Please specify as fully as you can, materials/titles, publications/titles, projects or programmes)

a. Literature	a .
b. Site visits	b .
c. Meetings with other private forest –owners	c .
d. Training	d.
e. Other (Please specify)	e .

xi. What weaknesses/difficulties exist in the type and level of biodiversity advice provided to private forest-land owners? e.g. or, skills & shortage, or not interested.

a. Information is not available	□ a.
b. Information is out-of-date.	b .
c. Knowledge is not adequate.	c .
d. Skills in communication are not adequate.	d.
e. Target audience is difficult to contact.	e .
f. Target audience is not interested.	f.
g. Other (Please specify)	g.

xii. **If possible**, please specify the organisations or groups to which the weaknesses/difficulties identified above apply.

- xiii. What activities or actions do private owners of forest-land think they can implement immediately to conserve the biodiversity of their land? Where do they feel they should seek help, if they need it?
- xiv. How do the private owners of forest-land think they can work with other private forest-land owners, in the conservation of the biodiversity on their land and manage their forests sustainably?

3. Management of Private Forests.

i. On what forest management subjects do private owners of forest-land require advice or help? (Highly, Medium, Less important)

a. Felling & thinning programmes/standards	$\square \square \square$
b. Natural regeneration planting programmes/standards	
c. Sources of EU approved growing stock meeting biodiversity requirements	
d. Sources of growing stock of local provenance.	
e. Clarification of regulations on Genetically Modified Organisms.	
f. Retention of old (veteran) trees.	
g. Identification and location of habitats and species of biodiversity importance.	
h. Identification of management required by habitats and species of biodiversity importance.	
i. Management of wet areas and streams within	
forest-lands.	
j. Management of peat and swamp areas within forest-lands.	
k. Protection measures for rare animals and plants.	

1. Control and introduction of exotic species.	
m. Arrangements for sustainable hunting.	
n. Sources of financial assistance.	

4. Financial Assistance.

- i. What financial assistance is already available to private owners of forestland? (Refer to earlier questionnaire)
- ii. Why is the available financial assistance not used more fully?
- iii. What management issues are likely to require financial assistance if biodiversity conservation is to be achieved on privately owned forest-land?
- iv. Please indicate, if possible, the levels of financial assistance that are likely to be needed in relation to management programmes (See question 3 above).

5. Other.

i. Please provide any further comments, which you consider might be of use in a trial project aimed at developing policies and programmes for biodiversity conservation within privately owned forest-land.