

Timber Workers for Forests has adopted the following forest management policy as developed by Pro Silva*.

Based on a broad approach to sustainability we present these policy statements on four issues of major importance to present day forest and plantation management.

- 1) the basic principles of responsible forest management and forest utilisation,**
- 2) the maintenance of biodiversity,**
- 3) the use of exotic species, and**
- 4) the ecological role of forests in the landscape.**

We promote forest use which follows natural processes. By these means, ecological and economic risks are reduced.

We are convinced that it is possible to commence the change from a regimented type of forest management to the type of management and silviculture advocated by PRO SILVA at almost any stage of stand development. Within a range of stand types, forest protection, management and utilisation can assist in regenerating and conserving the forest.

We support the implementation of such management in the following ways:

- Exchange of information within regional working groups
- Establishment of demonstration forests
- Meetings and excursions in demonstration forests; including meaningful community consultation
- Cooperation with educational and scientific institutions, and other bodies around the world.

General principles

We promote forest management strategies which optimise the maintenance, conservation and utilisation of forest ecosystems in such a way that the ecological and socio-economic functions are sustainable and profitable. This general approach to management includes market and non-market objectives, and takes the whole forest ecosystem into consideration.

With reference to sustainability in its broadest sense we believe that forests provide four categories of benefit to society.

1. Conservation of ecosystems
2. Protection of soil and climate
3. Production of timber and other products
4. Recreation, amenity, and cultural aspects

1. Conservation of ecosystems

The maintenance of ecosystems provides a basis for the protective, productive and recreational functions of forests. However society may wish to utilise the forest, the vitality and inter-relation of life forms within the forest ecosystem provides the foundation for all the other functions of the forest.

The preservation, and if necessary the restoration, of the ecosystem is, therefore, the first priority.

Elements of ecosystems are:

- Local and regional diversity of flora and fauna (species diversity)
- Genetic diversity within the local population of each species, providing the possibility for evolutionary development (genetic diversity)
- Local and regional diversity of ecosystems (spatial and temporal diversity in structure)
- The occurrence of ecological processes (natural and semi-natural forest dynamics)
- The ecological network
- The ecological interactions of forests in relation to the environment (world-, regional- and local climate, and interaction with surrounding landscape)

We recommend the following essential methods to allow forest ecosystems to function:

- Paying serious attention to (i.e. maintaining or restoring) the natural forest vegetation pattern, while making use of the forest
- Maintenance of soil productivity, through continuous cover and through the maintenance of biomass in the forest (including dead wood)
- Propagation of mixed forest with special attention to rare and endangered species
- Restricting the use of exotics to cases where this is an economic necessity, and then
- only if the exotics can be mixed with the indigenous vegetation pattern within certain quantitative and

qualitative limits

- In special cases, forgo any harvest.

The elements of the conservation of forest ecosystems, as stated above, correspond to the declaration on biodiversity which was made at the Rio conference in 1992.

The protection, production and recreational functions of the forest are all based on the conservation of the ecosystem; and they are all, in their own way, important to society.

2. Protection

Essential elements of the protective function are:

- Protection or restoration of the natural soil fertility and soil structure (soil protection)
- Protection of natural forest types (biotope protection)
- Protection of typical and rare or endangered species (species protection)
- Protection against erosion (erosion protection)
- Protection and cleaning of water (water protection)
- Protection or improvement of forest climate and its impact on surrounding landscape (local and regional climate protection)
- Maintenance and improvement of carbon storage (world climate protection)
- Protection or improvement of air quality (emission protection)
- Protection against noise (noise protection)
- Concealment of visually disturbing elements in the landscape (visual protection)

Most elements of the protective function are, at the same time, an integral part of the conservation function of forest ecosystems and so cannot be considered or dealt with separately.

We consider the following methods essential to achieve the benefits from the protective functions of the forest:

- Adopt a holistic approach involving perpetual forest cover
- Achieve specific biological protective functions by specific measures, for example, limits on exploitation, use of exotics, fertiliser, harvesting methods, drainage, etc.;
- Establish a regional network of protected forest areas of various kinds, including some non-intervention areas
- Adopt specific strategies for physical protective functions such as prevention of erosion, conservation of water supplies, visual aspects, and capture of pollutants.

3. Production

We regard sustainable forest ecosystems as the proper basis of economic sustainability.

Protection and production are both important to society.

For sustainability in the broadest sense, continuing and optimal productivity is only possible if the protective function remains intact.

This precludes production strategies that ignore the protective function.

We support the management of forests and the use of renewable resources of timber.

With regard to the general principles of sustainability, the following are essential elements of the productive function:

- Maintenance of the soil fertility
- Guaranteed continuity of the forest ecosystems and timber production
- Maintenance of the natural energy and mineral cycles

As methods for achieving the functioning of these elements we recommend:

- Continuous forest cover to protect soil productivity
- Full use of natural dynamic forest processes
- Adding value by selection felling and tending at all stages of development
- Maintaining growing stock at an optimal level
- Working towards a balance between increment and harvesting in each management unit (i.e. in each compartment)
- Increase forest stability, and consequently reduce production risks, through stabilisation of single trees and groups of trees
- Paying attention to the function of every single tree in tending and harvesting

- Avoidance of clearcuts and other methods which destroy forest conditions
- Abolition of rotation age as the instrument for determining when a tree should be cut
- Undertaking renewal of the forest as an integral part of forest tending
- Spontaneous forest renewal and forest development, through single tree harvesting and group harvesting with long regeneration periods, involving
 1. use of natural regeneration
 2. use of natural stem number reduction
 3. harvesting methods which do not harm the soil or the stand
 4. use of appropriate machines, which suit the structure and features of the forest
 5. minimisation of the use of additional materials (fertilisers, plant protection materials)
 6. restoration of densities of wild life to levels which are in balance with the carrying capacity

Tending and harvesting should be the main features of management, and these should not be unduly influenced by the need to obtain regeneration. ... and so the process continues without clearfell, burn and sow...

- * PRO SILVA is a federation of foresters who advocate forest management based on natural processes, also known as *Close-To-Nature Forest Management*
PRO SILVA was founded in Slovenia in 1989.

http://www.prosilva.fr/html/index_test.html