

## 3.6 Event VI: Forestry Course

### 3.6.1 Preparation of the Forestry Course

This event is a team contest; all 4 contestants start together. It doesn't take place at the competition site but in a nearby forest. Following equipment may be used:

- § Before starting the team gets:
  - A map of the track: All 16 tasks are marked and the distance between the single tasks are in the map with the scale
  - 2 Pencils, piece of paper without marks
  - Relascope tables / yield tables (or at the single task)
  - The relascope stick without any marks in the shaft. The kind of relascope will be a stick of 1 m and a plate of 4 cm x 4 cm (the factor to multiply is 4).  
*The teams are checked before starting. If the jury finds something which is not allowed, the team will be disqualified for Forestry Course.*
- § There will be clear signs on the track to find the tasks:
  - The track may be marked with **red/white** ribbons
  - Numbering of the tasks:
    - Pay attention to the **black** numbers on **yellow** background 2
    - The order of the tasks is accidental!
  - One tree of the task is marked with **blue** ribbon (task 1, 2, 5, 8, 9)
  - Sample plots are marked with **yellow** ribbon (task 3, 4, 6, 7, 10)
- § The answer will be written or signed on a single protocol at every task (also starting number and country). The jury gives the protocol to the team. The contestants may write their answer on their own protocol. At every task the team must clearly mark or write the right answer with a pen.
- § 2 judges (Int. / Nat.) watch the contestants at each task and don't support them. They collect the protocols.
- § It is not allowed to take mobile phones on the track.
- § The track will be checked by the Jury.

Each team is appointed a **time limit** set by the evaluation group: The **average** of all times + **20%**. The tasks should be solved within this limit – accept adventure and First Aid. If the team exceeds the allowed time, 20 penalty points are given for every minute more.

The minimum size of sample plot (task 3, 4, 6, 10) is 0.25 till 0.5 hectare. The sample plot and the trees of tasks 1, 2, 8 and 9 have to be marked noticeably. At task 8 and 9 the contestant can not touch the stems. It is forbidden to go with any equipment inside. There has to be a marked distance from min. 2 m between the stem and the contestants.

The second part of the course (tasks 11-16) is dedicated to general knowledge of forest-related tasks.

NEW: The course should be approximately at the same altitude and it is not necessarily a circle. The competitor should come at the particular task from upper side.

### 3.6.2 Performance of the Forestry Course

Nr.	Task	points max.
1.	The age of the tree, years	350
2.	The height of the tree above the ground, meters	350
3.	The number of the stems*, number / hectare. The stems belonging to diameter class 7 cm and above shall be included.	350
4.	Basal area*, m <sup>2</sup> / hectare. The stems belonging to diameter class 7 cm and above shall be included. (Exactness 1 m <sup>2</sup> )	350
5.	Slope of terrain*, in %. The estimate of slope shall be based upon the height difference between the two marked points. Slope shall be calculated as a percentage from the horizontal distance. (Exactness 1 %)	350
6.	Mean diameter* (breast-height diameter), cm. (Exactness 1 cm)	350
7.	Size of the area*, hectare. It is allowed to walk through the area. (Exactness 1/10 ha)	350
8.	Volume of the standing tree, m <sup>3</sup> (Exactness 1/10 m <sup>3</sup> )	350
9.	Volume of the saw log, m <sup>3</sup> (Exactness 1/10 m <sup>3</sup> )	350
10.	Sample Plot*	
	a. total growing stock, m <sup>3</sup> /hectare	450
	b. growing stock of hardwoods; % / hectare growing stock of softwoods, % / hectare	300
11.	Determining tree species (Latin, English)	350
12.	Determining kinds of wood with bark (Latin, English)	350
13.	Determining animals, hunting (Latin, English)	350
14.	First Aid in the forest (situated), prevention of accidents ** (English)	350
15.	Diseases and pests (Latin, English)	350
16.	Adventure (for example: shooting, national/traditional forest work)	350
	<b>Total</b>	<b>6000</b>

The contestants do not need to write the whole name in Latin or English, they only have to fill in the right numbers or set crosses in the right places.

\* The contestants should be able to walk inside the area.

\*\*First aid: Only a practical test for the team (no theoretical test). The organizer will inform all what will be in the first aid box (for example in the homepage) and will show it.

Volume of the standing tree: there will not be two stems (only one).

*The following lists of trees, wood, animals, pests, diseases may help the competitors to prepare for the competition:*

#### Determining tree species (parts of tree with foliage)

Latin	English
Abies alba	Silver fir
Acer campestre	Hedge or field maple
Acer platanoides	Norway maple
Acer pseudoplatanus	Sycamore maple
Alnus glutinosa	Common alder
Alnus incana	Grey alder
Betula (pendula, pubescens)	Birch
Corylus avellana	Hazel nut
Fagus silvatica	Beech (common -)
Fraxinus excelsior	Ash (common-)
Larix sp.	Larch
Picea abies	Spruce
Pinus silvestris	Scots pine

Populus tremula	Aspen
Prunus avium	Wild cherry, bird cherry
Pseudotsuga menziesii	Douglas fir
Quercus petraea	Sessile oak
Quercus robur	English oak
Salix sp.	Willow
Sorbus aucuparia	Rowan, mountain ash
Taxus baccata	Yew
Tilia (cordata, platyphyllos)	Lime / linden (Common-, Silver-)
Ulmus (glabra, arpinifolia)	Elm

**Determining kinds of wood (log with bark)**

Latin	English
Acer sp.	Maple
Alnus sp.	Alder
Betula sp.	Birch
Fagus silvatica	Beech (Common -)
Fraxinus excelsior	Ash
Larix sp.	Larch
Picea abies	Spruce
Pinus silvestris	Scots Pine
Populus tremula	Aspen
Prunus avium	Wild cherry, bird cherry
Quercus sp.	Oak
Tilia sp.	Linden, lime

**Determining animals (body, head, trophy, footprint/track)**

Latin	English
Accipiter nisus	Sparrowhawk
Alces alces	elk, moose
Anas platyrhynchos	mallard (duck)
Aquila chrysaetos	golden eagle
Buteo buteo	common buzzard
Bubo bubo	eagle owl
Canis lupus	gray wolf
Capra ibex	ibex, rock goat
Capreolus capreolus	roe (deer, -buck)
Castor sp.	Beaver
Cervus elaphus	red deer
Columba palumbus	Common Wood-Pigeon
Corvus corone corone	carrion crow
Dama dama	fallow-deer
Dendrocopos major	spotted woodpecker
Dryocopus martius	Black woodpecker
Falco peregrinus	peregrine (falcon)
Falco tinnunculus	Kestrel
Felis silvestris	Wildcat
Garrulus glandarius	eurasian jay
Lepus europaeus	brown hare
Lynx lynx	Lynx
Lyrurus tetrix	black cock
Martes ( - martes, - foina)	marten (pine -, stone -)
Meles meles	Badger

Mustela nivalis	Weasel
Perdix perdix	grey partridge
Phasianus colchicus	ring-necked pheasant
Pica pica	black-billed magpie
Picus viridis	green woodpecker
Procyon lotor	Raccoon
Rangifer tarandus	reindeer
Rupicapra rupicapra	chamois
Sciurus vulgaris	Eurasian red squirrel
Sus scrofa	wild boar
Tetrao urogallos	capercaillie, mountain-cock
Tetrastes bonasia	hazel-hen
Ursus arctos	brown bear
Vulpes vulpes	(european) fox

### Recognising pests, diseases and damages

Latin	English
Blastophagus minor	Lesser pine-shoot beetle
Blastophagus (Myelophilus) piniperda	Large / common pine-shoot beetle
Ceratocystis sp.	Blue stain
Cronartium flaccidum	Scots pine blister rust
Fomes annosus	Butt rot
Hyllobius abietis	Large pine weevil
Ips typographus	8-toothed bark beetle
Lachnellula willkommii	Larch cancer
Pityogenes chalcographus	6-toothed spruce bark beetle
Xyloterus lineatus	Spruce ambrosia beetle
N.N.	Damages caused by antlers
N.N.	Damages caused by mammals (browse impact)

### 3.6.3 Evaluation of the Forestry Course

The right solutions will be presented to all teams. The organizing country makes a proposal for the evaluation of every single task (evaluation table). The head jury will check both. Steps of 25 and/or 50 points make sense. In most of the estimating/counting tasks a difference to the right solution of more than 50% will mean 0 points at this task.

Total score is 6000 points. These points should be similar to the technical events (1.500 pts possible per contestant).

In the case of even results the winner is the team with the better time. If this result is the same too, the winner is the team with the higher points by task 10 a Sample plot - total growing stock.