

SEMI DISTURBED SEDIMENT SAMPLING

For taking semi disturbed samples in more or less swampy peat soils or in wet flabby and very soft (under water) mineral soils a number of special samplers have been included in the program.

04.09 Peat sampler, standard set for sampling to a depth of 10 m

The stainless steel peat sampler is in fact a kind of gouge auger. The peat sampler is pushed into the soil manually. The sample containing part is a half cylinder. The peat sampler distinguishes itself from the standard gouge auger as its cone is massive.

The sample containing section is sealed off by a plate (fin) that can pivot around the axle in the middle of the sampler and that is fitted with a cutting edge on one side. Having arrived at the correct sampling depth the complete sampler is given half a turn clockwise (180°). During the turning the fin remains in position which allows the half cylinder to be filled and closed again.

The half circular sample cylinder is kept closed by the other side of the fin during extraction.

The peat sampler is only suitable in flabby and very soft soils.

To achieve maximum stability the connections between the T-handle, the extension rods and the bottom part have been executed as conic threaded connections.

The standard set consists of: a T-handle with extension rods, an Edelman auger, a peat sampler, a push-/pull handle, tools, maintenance kit and a fibre glass utility probe. The whole is kept in a sturdy aluminum transport case.

Advantages

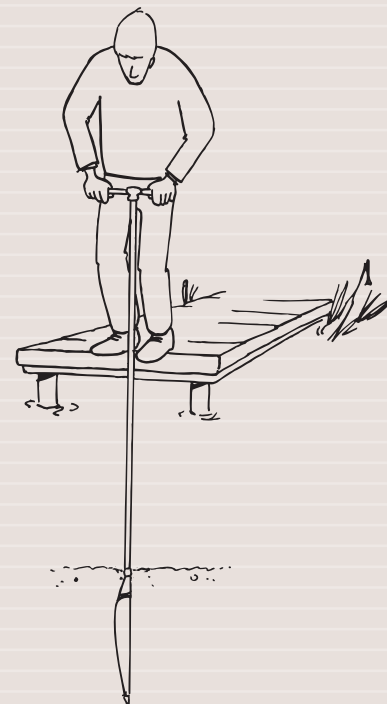
The advantages of a peat sampler by comparison to other gouge augers are:

- At almost any desired depth a semi disturbed sample can be extracted with a length of 50 cm.

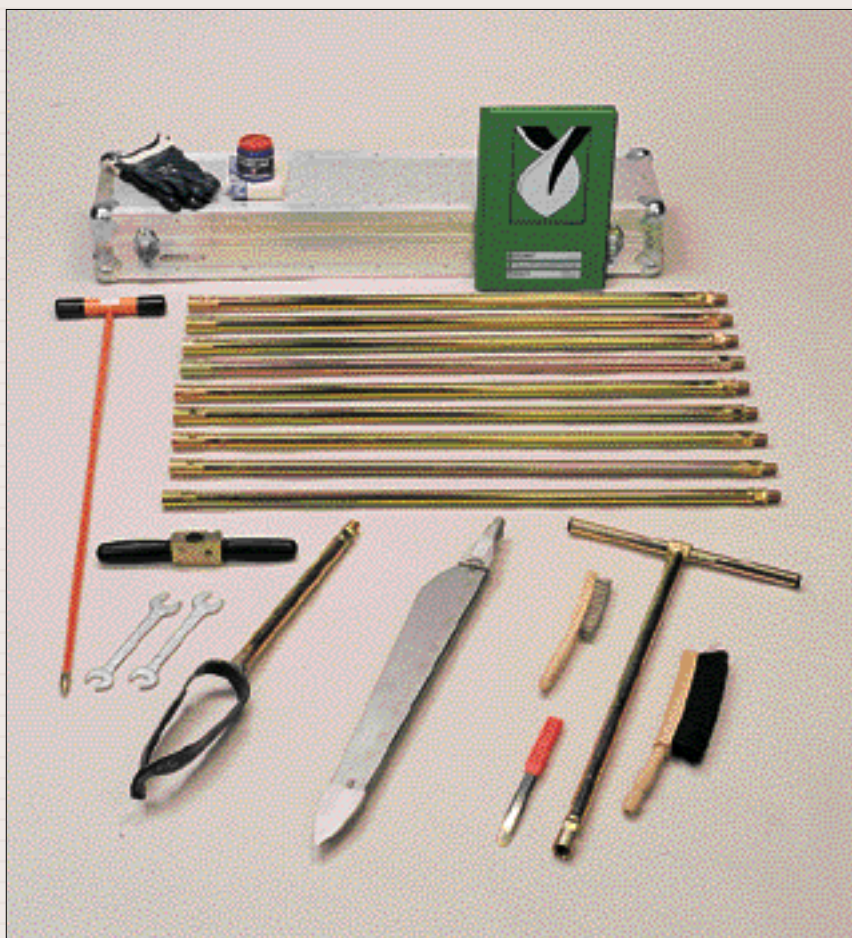
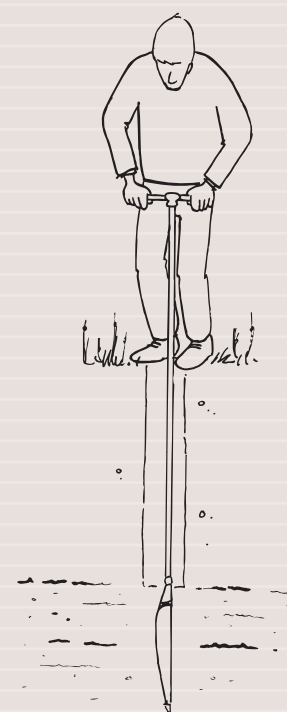


P1.43
Parts List
Pg 325

The peat sampler is used to take a sediment sample.



After pre-drilling with the Edelman auger a sample is taken of the wet peat with the peat sampler.



Peat sampler set

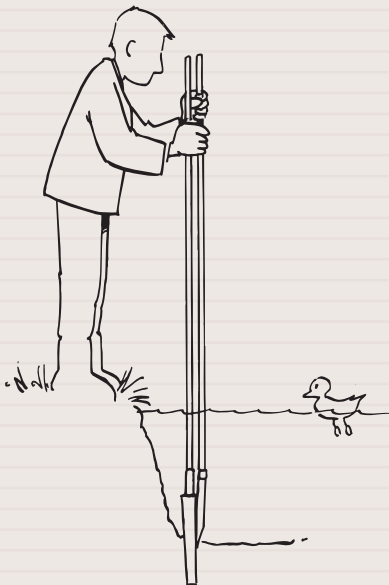


P1.43
Parts List
Pg 325

After opening the peat sampler the sample can be studied immediately.



The Vrijwit auger is used to take a sample from the bottom of a ditch.



SEMI DISTURBED SEDIMENT SAMPLING



- It is possible to take samples below the groundwater level or from below the surface water.
- Because the fin closes the half cylinder properly it is possible to take samples from very soft and flabby soils.

The limitations are:

- Substantial penetration resistance because of the massive cone.
- In very fibrous soils the sharp edge of the sampling part may not cut the fibers, causing the fin to stay partly open and resulting in sample loss or contamination with upper layers (specially in case of very soft soil materials).

Applications

The peat sampler enables to take undisturbed samples from soft soils at predetermined depths on behalf of:

- Environmental studies.
- Visual interpretation of a soil layer.
- Soft sediment sampling.

- Palaeontological research.

04.22 Vrijwit auger

The Vrijwit auger is a stainless steel wedge shaped sampler. The sampler can be opened on one end by means of a slide. The opened Vrijwit auger is pressed vertically into the soil using extension rods.

As soon as the desired depth has been reached the auger is closed by means of the slide.

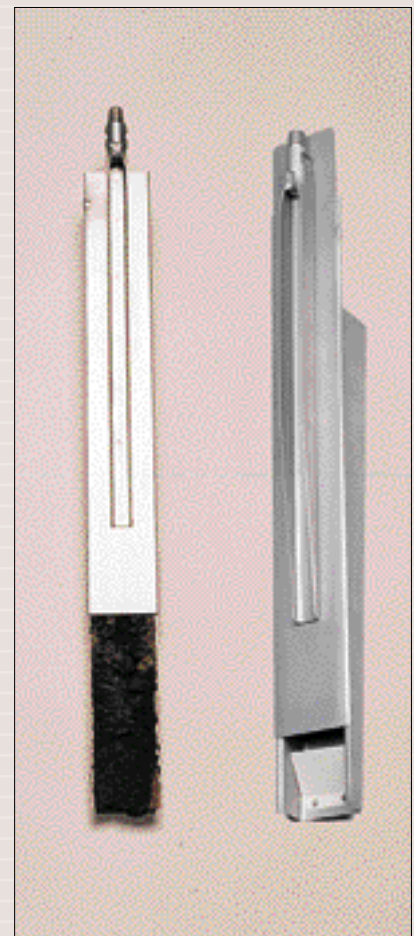
By removing the slide after sampling it is possible to efficiently and quickly give an accurate description of the stratification and composition of the soil.

Applications

The Vrijwit auger is specially suitable for taking samples from fairly coherent to coherent material (clay, loamy sand, containing a lot of undecayed material). The auger is extremely suitable for taking samples from small waterways or (not too dry) grown over banks in which a lot of roots and dead organic material is present.



Peat sampler



Vrijwit auger