Fig. 5: Today plantations of Scots pine extend over much of the forested area in Fennoscandia, a circumstance qualifying in terms of biological diversity the statement that this is 'Europe's most forested region'. This is where wood midge diversity is at its lowest. In this pine plantation in Patvinsuo National Park in Finnish Karelia, a single age-old pine tree has been miraculously spared from axe and chain saw.

Fig. 6: Sweepnetting wood midges over a fallen Norway spruce tree in Kivach Strict Nature Reserve in Russian Karelia. With 105 species recorded, Kivach Forest has been proven to be the top wood midge site in all of Fennoscandia. When we visited Kivach in June 2005, mosquito abundance seemed to outnumber that of all other dipterans together.

Fig. 7: Another scene from Kivach: a Malaise trap fed with rotting birch wood gathered from the trap's vicinity. Lestremiines that are reluctant to fly actively, such as trichopteromyias, are captured more effectively by this than by any other method.

more promising than brown-rotting (Mamaev & Krivosheina 1965). Malaise traps can be kept working non-stop for up to six weeks, but should be checked every now and then for spider webs blocking the collection jar. In a uniform forest, on plain relief, two or three traps placed at intervals of 100 metres will capture a good share of the local fauna.

Sweepnetting is most effective on warm, humid mornings, i.e. after the morning dew but before the sunlight becomes too intense, which causes the sensitive midges to become immobile and hide in shady places. On cloudy days flight activity continues until the early afternoon and then drops markedly and rather suddenly. Air temperature should not drop below 15 °C. When sweeping, the net should pass as close as possible to the forest floor or log surfaces without touching them (Fig. 6). Too powerful sweeping through dense vegetation will beat these fragile, delicate midges to pieces. It is best to step backwards when sweeping, since the collector's steps will cause roosting midges to leave their hiding places. To bang on stumps or logs has the same effect.

Collecting by aspirator requires special weather conditions that tempt lestremiines to swarm. Such conditions are met on calm, humid, and warm mornings. Lestremiine swarms typically keep close to any surfaces, last for minutes when left undisturbed, may expand over several square metres and then consist of hundreds or even thousands of individuals, usually exclusively males. The tips of branches or twigs serve occasionally as markers for gathering much smaller swarms. Wind gusts cause the midges to touch down, while too hasty action by the collector causes them to escape with a speedy upward movement. True mating swarms, often performed in intense sunlight, are known for species of *Anarete*, *Conarete*, and *Micromya*. Some experience is required to differentiate in the field between flying Lestremiinae and other tiny Diptera, such as other Cecidomyiidae and Sciaridae, and Hymenoptera. Lestremiines fly in very short zig-zags, not straight,