Sommaren 2013 genomförde SLU en inventering av almsplintborrar i projektet LifeELMIAS. Resultatet av inventeringen presenteras här.

Action D2 was started early in summer 2013 when 110 traps (Fig. 5) were placed in three different sampling sites Högrän, Vallstena and Tingstäde in Gotland (milestone). At each site, traps were placed along transects (from elm rich area to elm poor area) by placing individual traps at every 50 m (Fig. 6).

At the beginning of flying season (week 24), 50 traps were placed at Högrän, 50 at Vallstena and 10 at Tingstäde, and for each a GPS position was recorded. As a result, a permanent network of traps was established in Gotland and will be used during entire time of the project and after the project for the monitoring DED vectored by the elm beetles. Sites at Högrän and Vallstena represented the areas affected by DED while site at Tingstäde represented area free of DED. Traps were checked and elm bark beetles collected every week. Results showed that during 2013 there were 32 beetles caught at Högrän and 6 at Vallstena (Fig. 7). At Tingstäde only a single Scolytus beetle was caught. The peaks of most abundant catches occurred in June and early August (Fig. 7).

At the moment, Scolytus beetles caught during season 2013 are being lyophilized and used for isolation of DNA. By using fungal specific primers we plan to identify the proportion of beetles carrying DED and to identify the vectored Ophiostoma species. The results will also show site specific patterns for DED. In addition, we plan to study communities of fungi associated with Scolytus multistriatus by using massively parallel sequencing.
Action D2 is implemented according to the original plan. During the next reporting period, the action will be continued as originally planned including the regular sampling of the elm bark beetles during their flying periods and analyses of vectored DED pathogens. In quantitative terms so far achieved: established network of the traps; sampled collection of the elm bark beetles for 2013 which are used for molecular work and identification of DED fungal species and their abundance; identified areas and periods of intensive flying of the bark beetles. The information on elm bark beetles collected during 2013 and their flying periods was previously provided to SFA.