Geophysical Research Abstracts,
Vol. 10, EGU2008-A-11840, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-11840
EGU General Assembly 2008

Restoration of extremely steep ski-slopes in high alpine altitudes

W. Tiwald

(1) Engineering consultants for forestry, torrent and avalanche control, Langseitenrotte 19, 3223 Wienerbruck, Austria (office.tiwald@aon.at)

The restoration of new built, extremely steep ski-slopes is special challenge. In this case restoration has to work quickly and successfully, otherwise could be great damages with erosion.

Some examples:

„Harakiri"-ski-slope in the ski-area Mayrhofen AT: Position: Zillertal, Tyrol, exposition-north, elevation above sea-level:1.900 m. Originally the area was covered with the Plant Society of rhododendron ferruginosum and alpine lawn. The landscape was very steep and rocky and very difficult for building a ski slope. The vegetation transplanted with an excavator and with handiwork. Shrubs (alnus viridis, salix sp.), which were also transplanted, were positioned in groups beside the slope. For the waterflow from the ski slope were built special retention basins. Areas with too less material from vegetation-transplantation were restores with straw-seeds.

Ski-slope „Pezid" in the ski-area of Serfaus, AT; Position: Inntal near the Swiss border (West-Tyrol), exposition: east to north, elevation above sea-level: 2.700 -2.500 m. In autumn 2004 to summer 2005 was built a new cable car with a ski slope on a mountain, the Pezid (2.800 m) in the ski area of Serfaus. The most of the special-Alpine-seed was seed by hand in the autumn (sleep-seed). Most of it germinated in spring.

Ski-slope „Gemeindealpe" in the ski area of Mitterbach, AT Position: south of Lower Austria near Mariazell, exposition: east, Elevation above sea-level: 1.600 m. Very steep (inclination 70%) ski-slope in a karst-area. In 2003 the slope was built but not

restored. That’s the reason why the whole humus was washed away. In 2005 a flat ski slope through a field of mountain-pines was built as bypass for the steep slope. The mountain pines were transplanted beside the slope and they grew successfully. The steep slope was covered with humus (about 200 wagonloads of humus).On the humus was seed a cover-fruit (rye) and later the special-alpine-seeds as a hydro-seed.