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Dendrochronologische Untersuchungen zur Verwaldung der Alpen am Beispiel eines inneralpinen Trockentals (Ramosch, Unterengadin, Schweiz)

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Abstract

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Since the end of World War II, especially between 1960 and 1980, the natural reforestation of the Swiss Alps accelerates. Predominant causes are connected to socio-economic changes, population shift to urban areas, abandonment of limited yield stands and changes in land management methods. The reforestation history of abandoned lands of the Inn Valley can be precisely reconstructed by dendrochronological methods. Initially, pioneer copses (*Juniperus* sp.) grew adjacent to rocks. Protected by juniper shrubs, Scots pine (*Pinus sylvestris*) established. Larch (*Larix decidua*) settled in open meadows. Grass and shrubs disappeared as pioneer tree stands expanded and provided new germination sites. The patches of forest merged with each other and formed extended forest areas. Today, fast growing pine dominates over spruce (*Picea abies*) on pioneer tree stands, but slow growing spruce dominates on stands reforested more than 80 years ago. Although browsing of wild and domesticated animals may have slowed the natural reforestation process, rates of reforestation continued to accelerate due to disruption of the grass cover by human and animal activity.

Key words: Natural reforestation, Swiss Alps, dendrochronology, Ramosch, abandoned land.

Einleitung

In weiten Teilen der Alpen und anderer Gebirge nahm die Waldfläche im Laufe des 20. Jahrhunderts zum Teil drastisch zu (Camaret et al. 1998, Miller und Halpern 1998). Ein Grund für diese landschaftsökologische Entwicklung alpiner Regionen ist, dass