

GDK 3+308:(083.9)

Prispelo / Received: 25.01.2003  
Sprejeto / Accepted: 20.05.2003

Izvirni znanstveni članek  
Original scientific paper

## MODELNA NAPOVED TREDOV LESNIH ZALOG V ODVISNOSTI OD JAKOSTI REDČENJ IN PROIZVODNE DOBE

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### Izvleček

Za različne ravni velikosti gozdne posesti smo napovedali različice razvoja gozdnih sestojev. V ta namen smo razvili računalniški algoritem, ki posnema razvoj gozdnih sestojev. Z njim smo izračunali prihodnja stanja lesnih zalog po gozdnih odsekih. Gozdn odseki so najvišja raven podrobnosti vhodnih podatkov, ki smo jih pridobili iz računalniške zbirke podatkov popisa gozdov. Simulacija gospodarskih ukrepov je določena s ciljno funkcijo približevanja rastišču primernih struktur lesnih zalog po drevesnih vrstah. Različice scenarijev smo ločili po intenziteti redčenj in dolžini proizvodnih dob. Boljši so scenariji, ki zagotovijo čim bolj rastišču primerne strukture sestojev. Model smo preizkusili na primeru gozdnogospodarske enote Jezersko.

Ključne besede: pridelava lesa, načrtovanje, ekološki vidik, napoved, računalniška simulacija, razvoj gozdnega sestoja, model

## A COMPUTER MODEL FOR EVALUATION OF CUTTING VOLUMES REGARDING FUTURE FOREST STAND DEVELOPMENT

### Abstract

*A prediction of future development for different sizes of forest properties and time scales was made as well as a computer algorithm for the simulation of future forest stand development. With the aid of the algorithm, we calculated the future situation of growing stock for a basic simulation unit of a forest section. The forest section was at the same time the smallest unit of input data, mostly taken from national forest inventory data. The management scenario simulation was controlled by the target function. The target function determined the difference between actual and model optimal growing stock by tree species. Scenarios were defined by thinning intensities and length of rotation period. Different scenario results were analyzed with respect to ecological aspects regarding the forest site demands. Models were tested in the Jezersko forest management unit.*

*Key words:* wood production, planning, ecological view, target situation, computer simulation, forest stand development, model

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