A lake dammed by a human-induced landslide

Lake Arló in Hungary

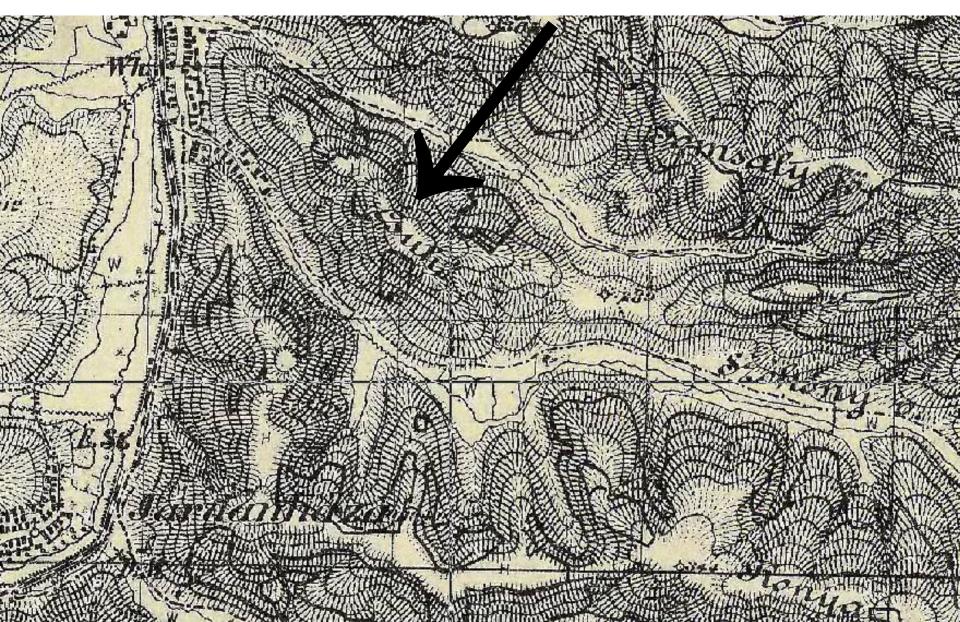
Gábor Gercsák, Budapest, Hungary Eötvös Loránd University

June 2016

Aerial photograph of Lake Arló



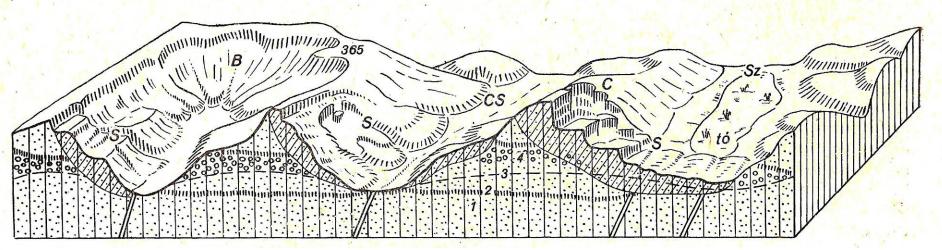
Third military survey (late 19th c.)



Start of the failure in 1863



Block diagram of the area



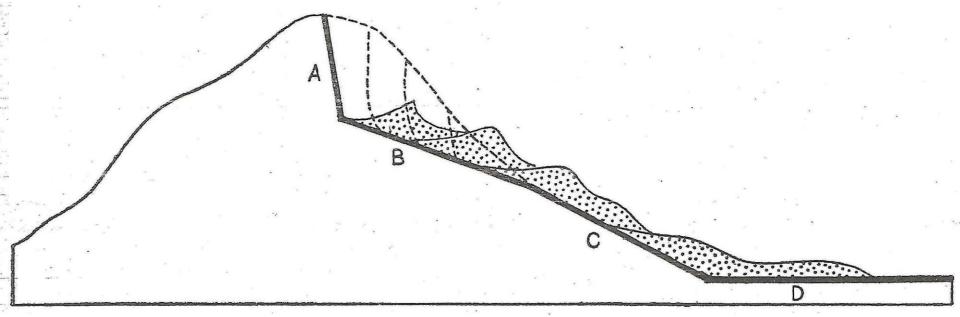
- B = Benéte Valley
- C = Csahó Hill
- Cs = Csahó Valley
- S = Landslides
- Sz = Szohony Valley
- tó = Lake

- 1 Lower Miocene 2 Coal seam
- 2 Coal seam
- 3 Water table
- 4 Loose pebbles under the upper coal seam



Disturbed mass

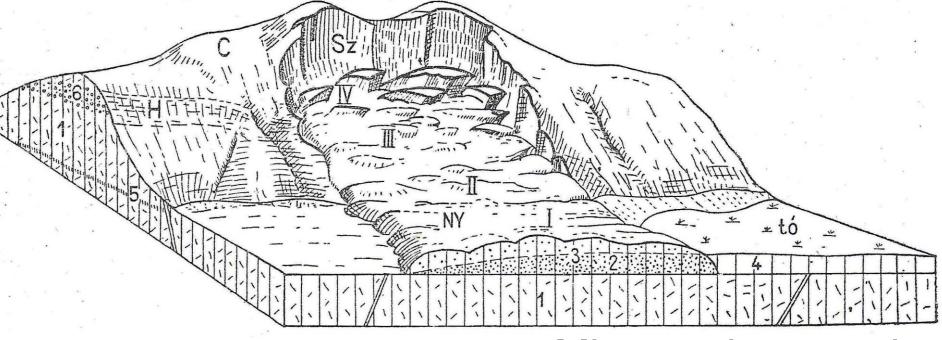
Cross-section of the slide path



Bottom to top = 145 m

- A = Fall line
- B = Slide path after the landslide
- C = Original plane of the slope
- D = Original valley bottom (193 m)

Block diagram of the slide



- C = Csahó Hill
- Sz = Rock wall
- Ny = Tongue
- H = Pebbles
- I-IV = Belts of the slide

- 1 = Miocene base rocks
- 2 = Saturated layer
- 3 = Level of water table
- 4 = Lakewater
- 5 = Lower coal level
- 6 = Pebbles

The slid hillside

