



**Alice Brambilla, Claudia Canedoli. How to continue measuring horn growth after capture in Alpine ibex. *Journal of Mountain Ecology*. 2013 (9): 35–46.**

#### Abstract

Accurate measurement of secondary sexual characters are fundamental for understanding life history strategies and mating systems. Ibex horns grow continuously through life and thus provide insights on individual life history. Horn growth can also reflect changes in environment and resources availability. Horn length is usually measured by hand on skulls of dead animals during live captures or with the use of two parallel lasers with a known distance pointed on the horns of the animal. Here we propose a simple method to measure horn growth of marked Alpine ibex (*Capra ibex*) in the years following capture. We took pictures of marked animals when the side of the horn was perpendicular to the lens of the camera and we analysed pictures using the 4th annulus measured during captures as a reference unit to estimate the length of the other annuli. We compared the annuli length estimated with this method with the length of the same annuli measured by hand. Our results show that the error of the estimate is very small and that there is a high repeat of annulus length estimate using pictures.

LINK: <http://www.mountaineecology.org/index.php/me/article/view/4>