

# Mechanical Properties of Ram Horns

- A horn is a living projection of the skin consisting mainly of keratin, a structural protein also found in hairs and nails
- Testing mechanical properties of ram horns:
  - Literature search on horns (structure, function, and mechanical properties)
  - Determine testing methods (hardness, compressive, or bending tests?)
  - Where on bulk materials should specimens be cut?  
Specimen dimensions
  - Conduct mechanical tests
  - Examine microstructure under SEM
  - Correlate structure with properties



Big-horn sheep



Horns from desert sheep