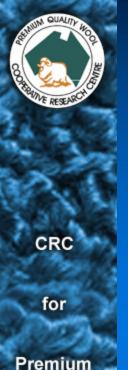


## Estimating Follicle and Fibre Density and S/P Ratio

Produced for the CRC for Premium Quality Wool undergraduate program by; Dr. Janelle Hocking Edwards, The University of Western Australia.



Quality

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# Traditional estimation of follicle and fibre density

- Follicle and fibre numbers are counted in a known area at the level of the sebaceous gland (C-D)
  - allows calculation of number of follicles or fibres per unit area of skin
  - identification of P and S follicles
  - unable to identify
    branched follicles at
    this level

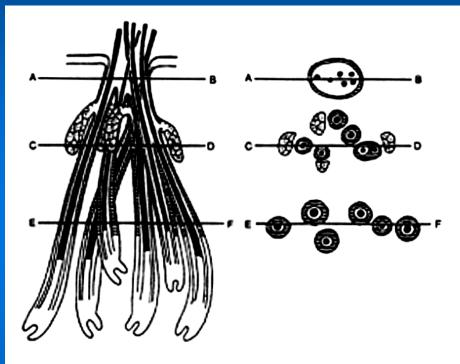
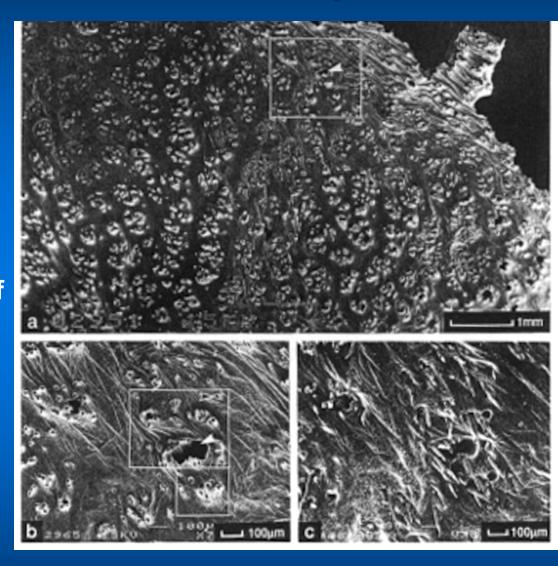


Fig. 3. Diagrammatic longitudinal and transverse sections at several different levels (A—B, C—D and E—F) through a bundle of six fully developed secondary follicles in the Merino (see Fig. 4 by Hardy and Lyne 1956a).



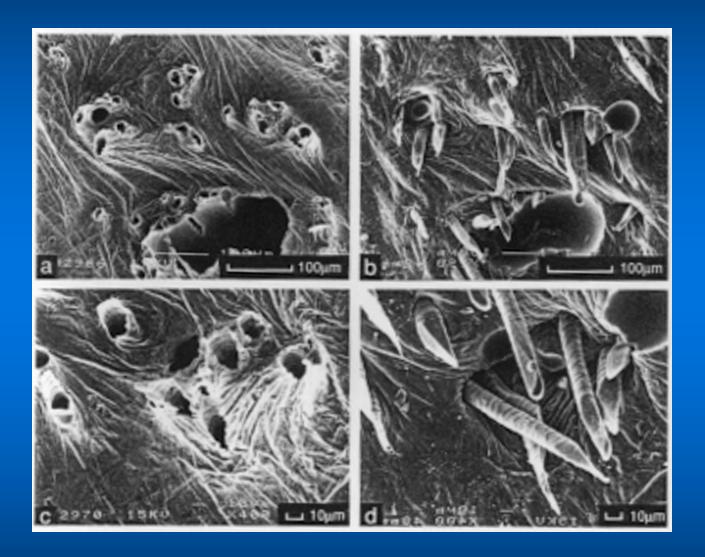
## Non-destructive techniques

- uses SEM
  images of
  impressions of
  skin surface
  - inexpensive
  - allows
     identification of
     original and
     branched
     secondary
     follicles



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### **Negative and positive skin replicas**





#### S:P

### Ratio of secondary to primary follicles

- S:P is used when there are changes in skin area occurring
- S:P is used to describe
  - secondary follicle initiation,
  - changes in the secondary follicle population

 Major assumption is that P follicle population does not change after 100 days of gestation

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