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Wool

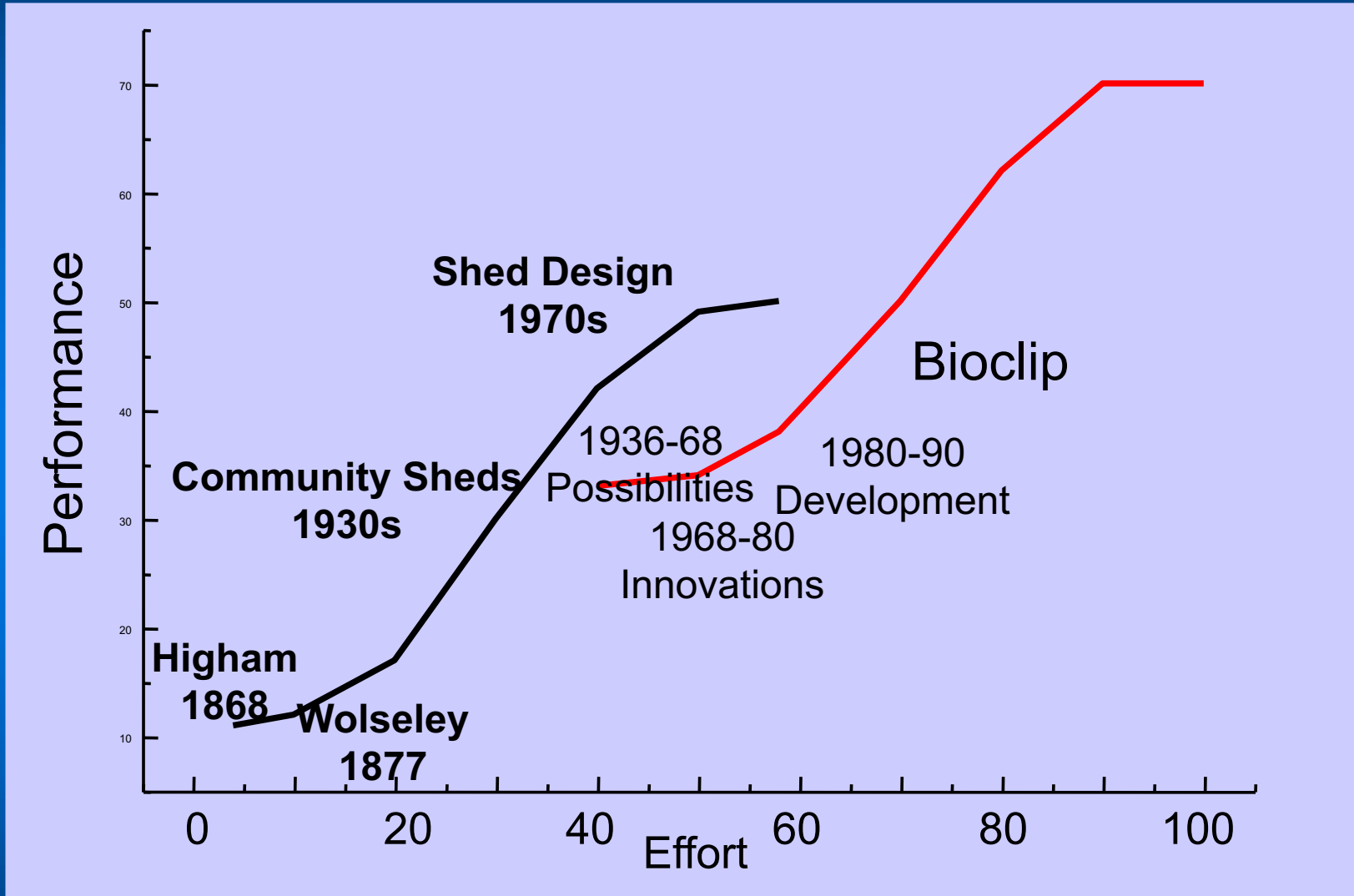
# Bioclip - A wool biology success story

Produced for the CRC for Premium Quality Wool undergraduate program by;  
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# Biological wool harvesting

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# Wool harvesting:

From this....

to this.....



Manual shearing



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# Advantages of biological wool harvesting

- no second cuts
- eliminates skin wounds and some bruising
- reduction in external parasites
- reduction in shearing equipment requirements
- use of unskilled labour

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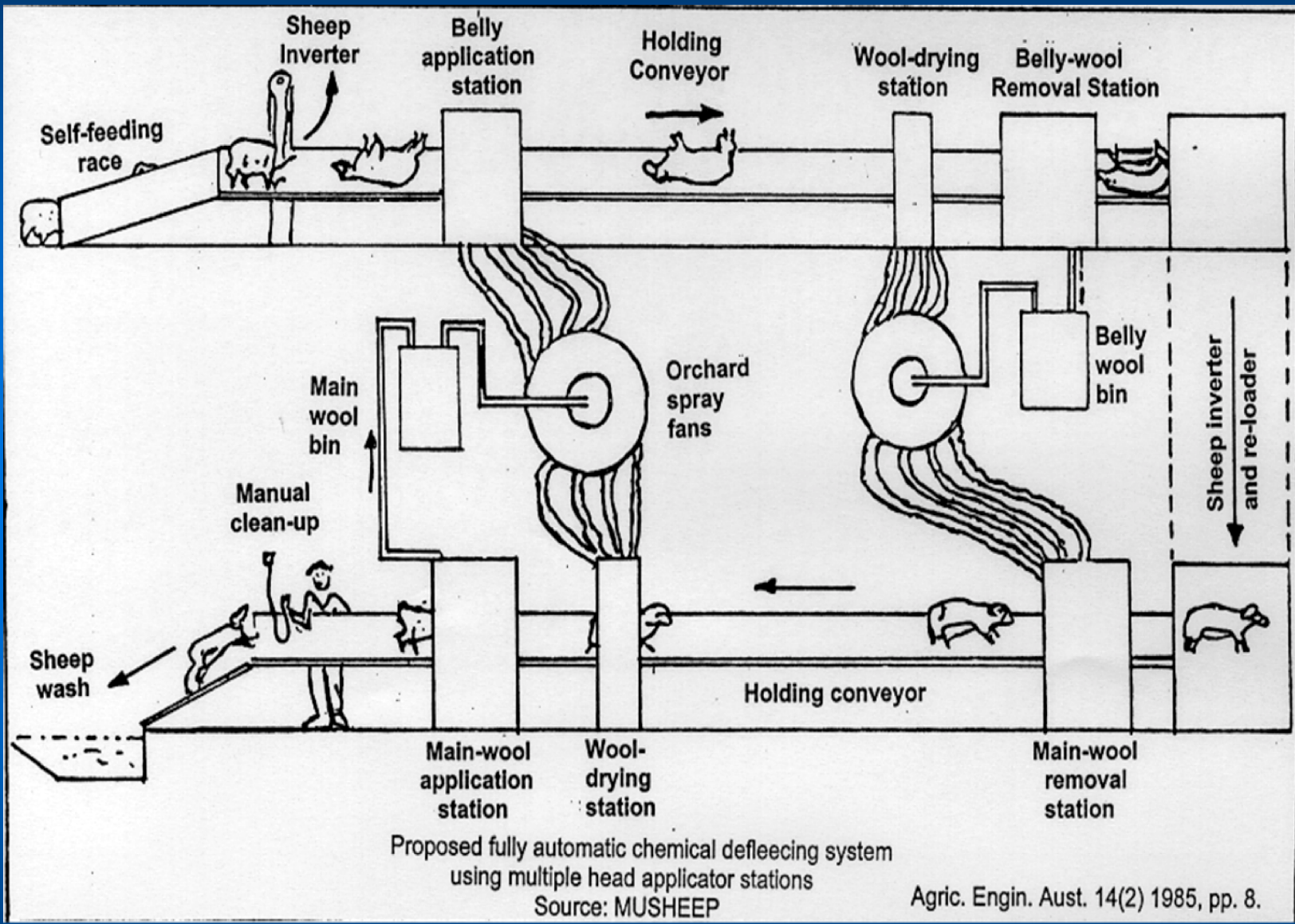
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# Disadvantages of biological wool harvesting

- cost of the drug
- fleece retention
- sun-burn and cold exposure problems
- use of coats
- use of drugs

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# Wool Harvesting Drugs

Drug	Dose Rate	Administration
CPA	20-30mg/kg	Various
Mimosine	80mg/kg	IV 1.5-2 days
	400-600mg/kg	Oral
Dexamethasone	8.5mg/kg <sup>0.75</sup>	I.S. 8 days
Flumethasone	1.3mg/kg <sup>0.75</sup>	I.S. 8 days
PAP	400mg/kg	Oral
EGF	120-150µg/kg	S.C.

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# Epidermal Growth Factor development

- EGF activity discovered during late 1970's
- Harvesting Options
  - weakened wool versus complete break
- Biological Hazards?
  - biological effects
  - rams
  - oestrous cycle
  - during pregnancy

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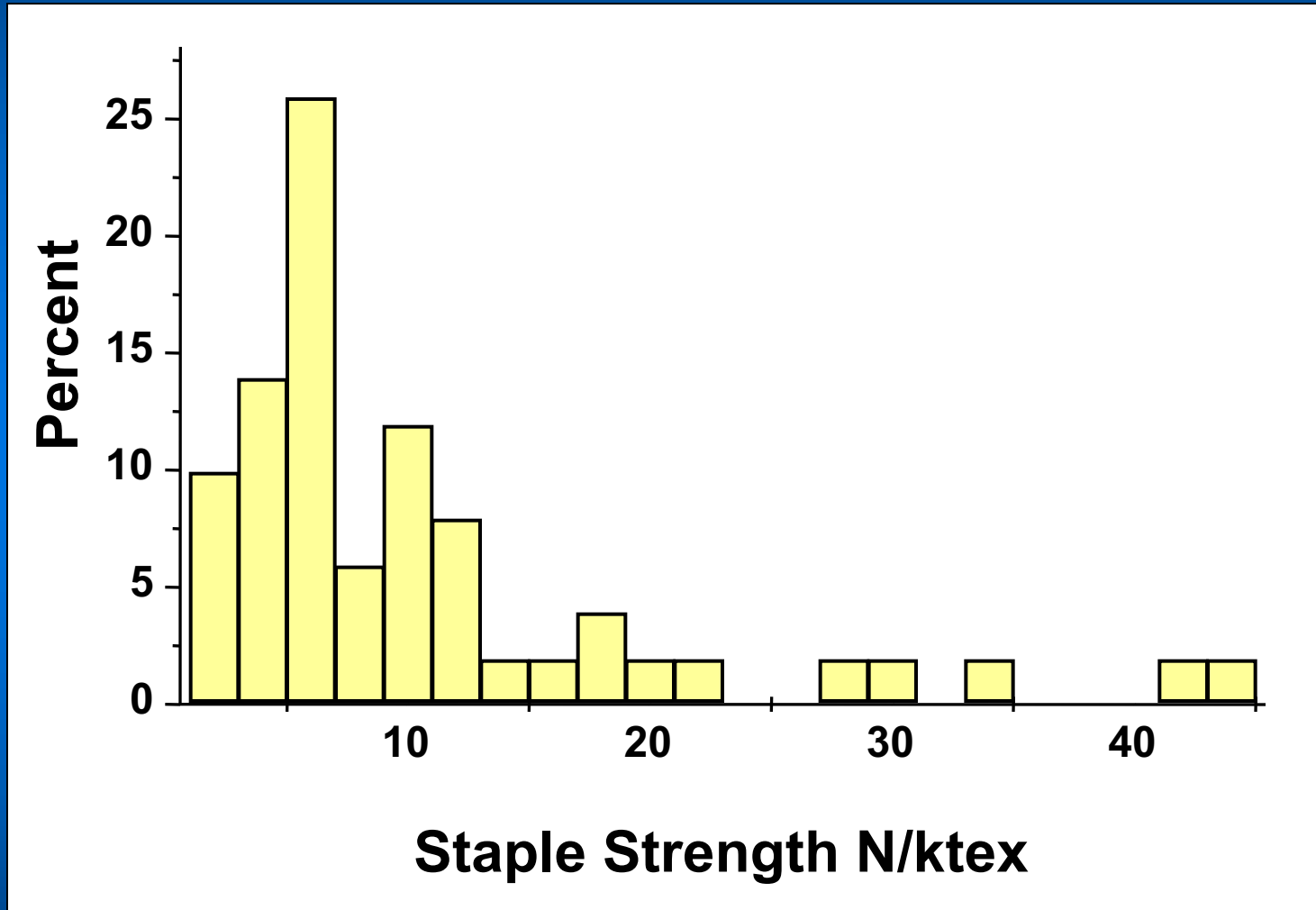
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# Failure of weakened wool!

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# Wool Collection

- Coats
  - for wool holding
  - for fleece retention
- Non-coats
  - controlled breaks



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# Summary

- The wool industry is innovative
- Wool harvesting has improved with time
- Currently wool harvesting is entering a phase of discontinuity
- Progress from basic biology to market in this case was 20 years

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