



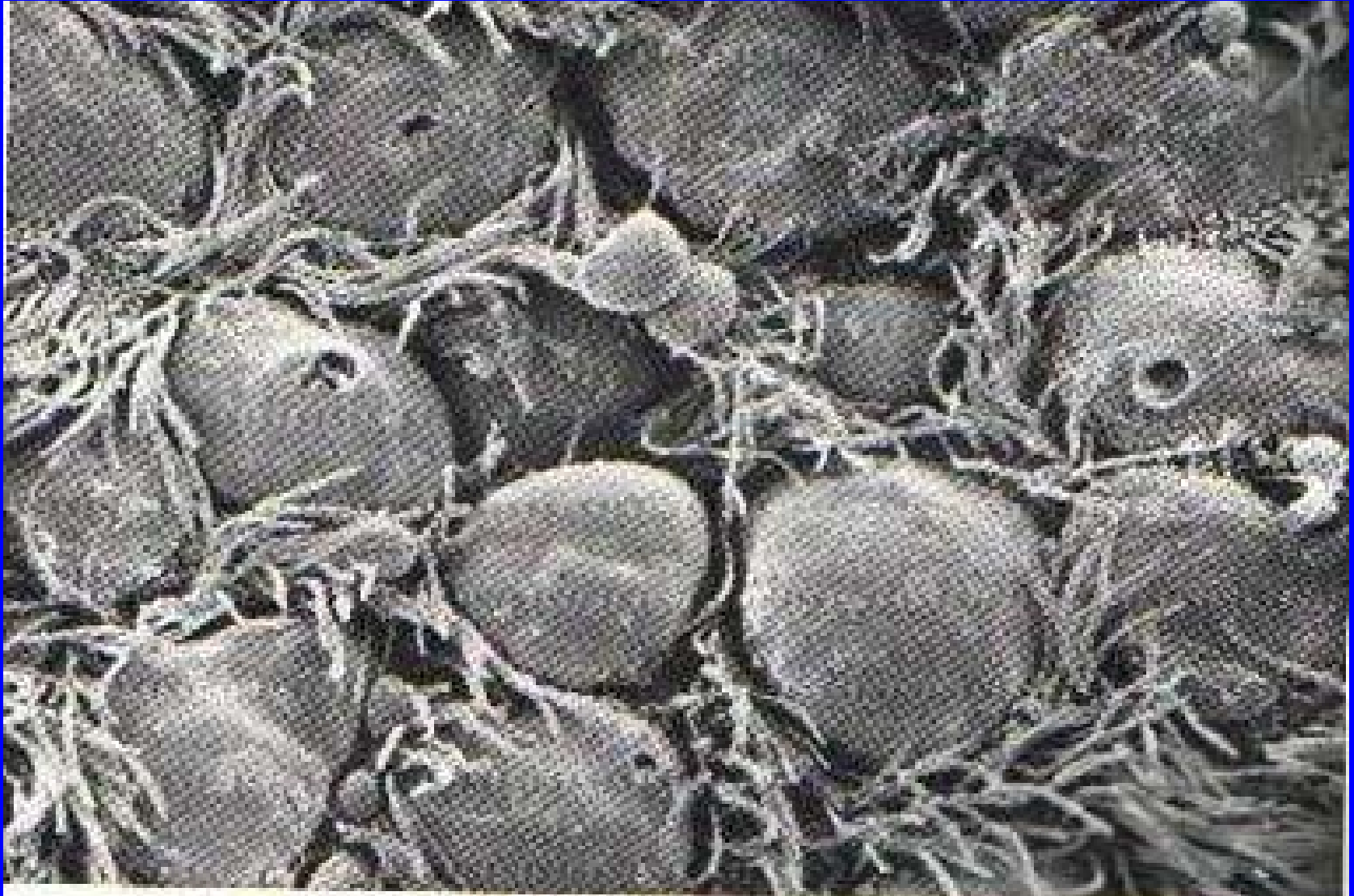
# Swiss Depopulation for eliminating *Mycoplasma hyopneumoniae*

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# Respiratory Disease in Pigs

- major issue for the pig industry.
- estimated that at least 60% of antibiotic use is attributed to respiratory disease
- *Mycoplasma hyopneumoniae* is a primary cause of pneumonia in pigs
- PHMS: 85% of herds infected
- estimated to cost producers about \$4.00 to \$8.00 per pig sold
- *M. hyo* increases severity of respiratory disease cause by *Actinobacillus pleuropneumoniae* and other bacteria.

# Cilia of the bronchioles



# Mycoplasma hyopneumoniae - the costs

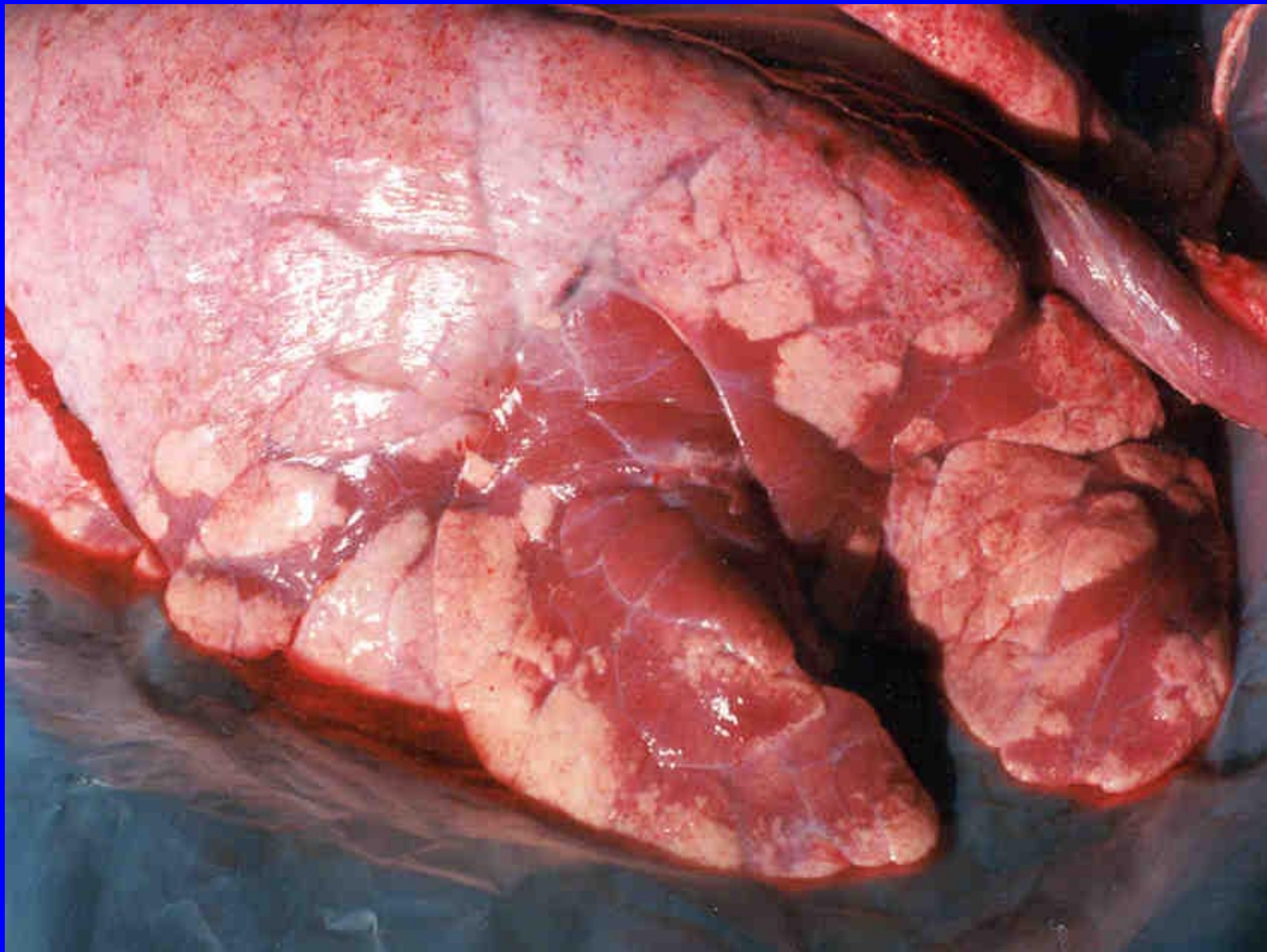
- reduced growth rates
- increased medication and vaccination costs
- increase variability in slaughter pigs (P2 and weight)
- increased poor doing pigs
- increased mortality rates
- increased severity

# Effects of M hyo on your farm

- growth rates
- mortality rates
- post mortems
- slaughter checks (Lung score of 6 : ADG reduced by 37 gm/d and FCR by 2.5%)
- laboratory testing

# The options to controlling effects of M hyo

- accept the disease ie do nothing
- management & husbandry to reduce its affects
  - all-in all-out
  - vaccination
  - Segregated early weaning
- Total Depopulation
- Swiss Depopulation





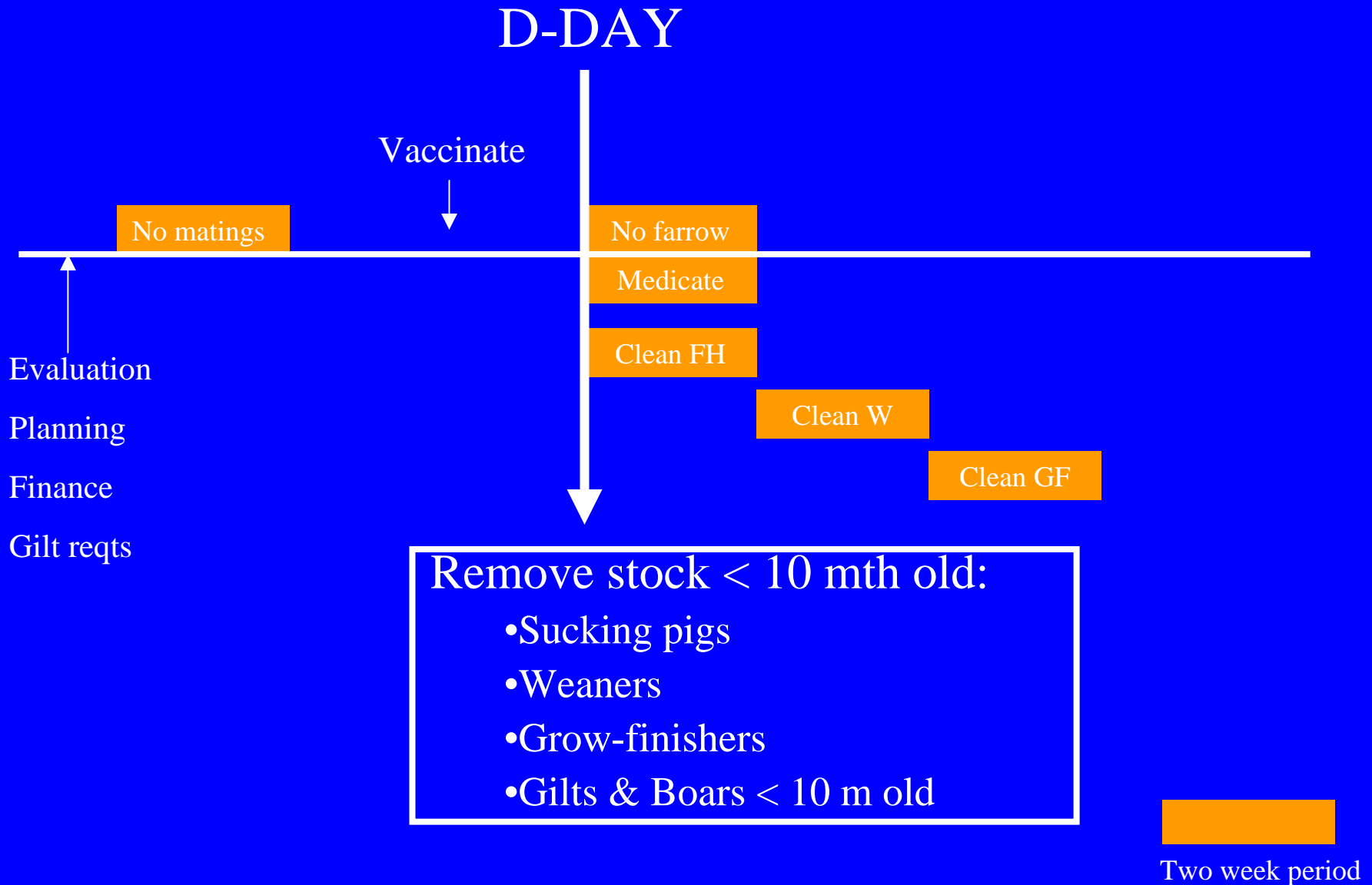
# Ecology of M hyo

- Only affects pigs
- Survives for only 2 days in a dry environment
- Pigs greater than 10 months and that have been appropriately medicated do not spread M. hyopneumoniae.
- Suckling piglets do not become exposed to M hyo from their mothers until after 14 days of age.

# Swiss Depop - The Principles

- All stock less than 10 months removed from facility
- No farrowings for 14 days.
- Medicate all remaining stock during this period
- Vaccinate breeding stock to be retained against M hyo
- All sheds, pens and equipment to be cleaned & disinfected

# Swiss Depop - The Principles



# Swiss Depop - Success rate

- success rate a function of farm size and planning.
- success rate is high for farms up to 400 sows.
- M hyo infection should be stable in the herd ie about 18 months after M hyo entered the herd.
- Source of future breeding stock free of M hyo.
- Biosecurity and training of staff.

Overall - expect 80-90 % success

# Practical issues

- cash-flow considerations and planning
- location of other herds
- management of breeding herd
- forward planning of gilt introduction
- relocating and disposal of young stock
- staff training and awareness

# Costs associated with Swiss Depop

- Medication
- Consultant fees
- Cleaning (maintenance)
- Housing for removed young stock

Overall about \$490 per sow  
*(cf \$780 per sow for total depop)*

# Cost-Benefit of Swiss Depop

## Example: 260 sow continuous operation

- Dry sow area
  - 230 weaned, mated, gestating sows
  - 13 boars
  - 23 unmated gilts
- Farrowing room (3 wk wean)
  - 30 nursing sows
  - 300 suckling piglets
- Weaner area
  - 600 weaners
- Grow-finish area
  - 1200 grow-finishers

## D- day (commencement of medication)

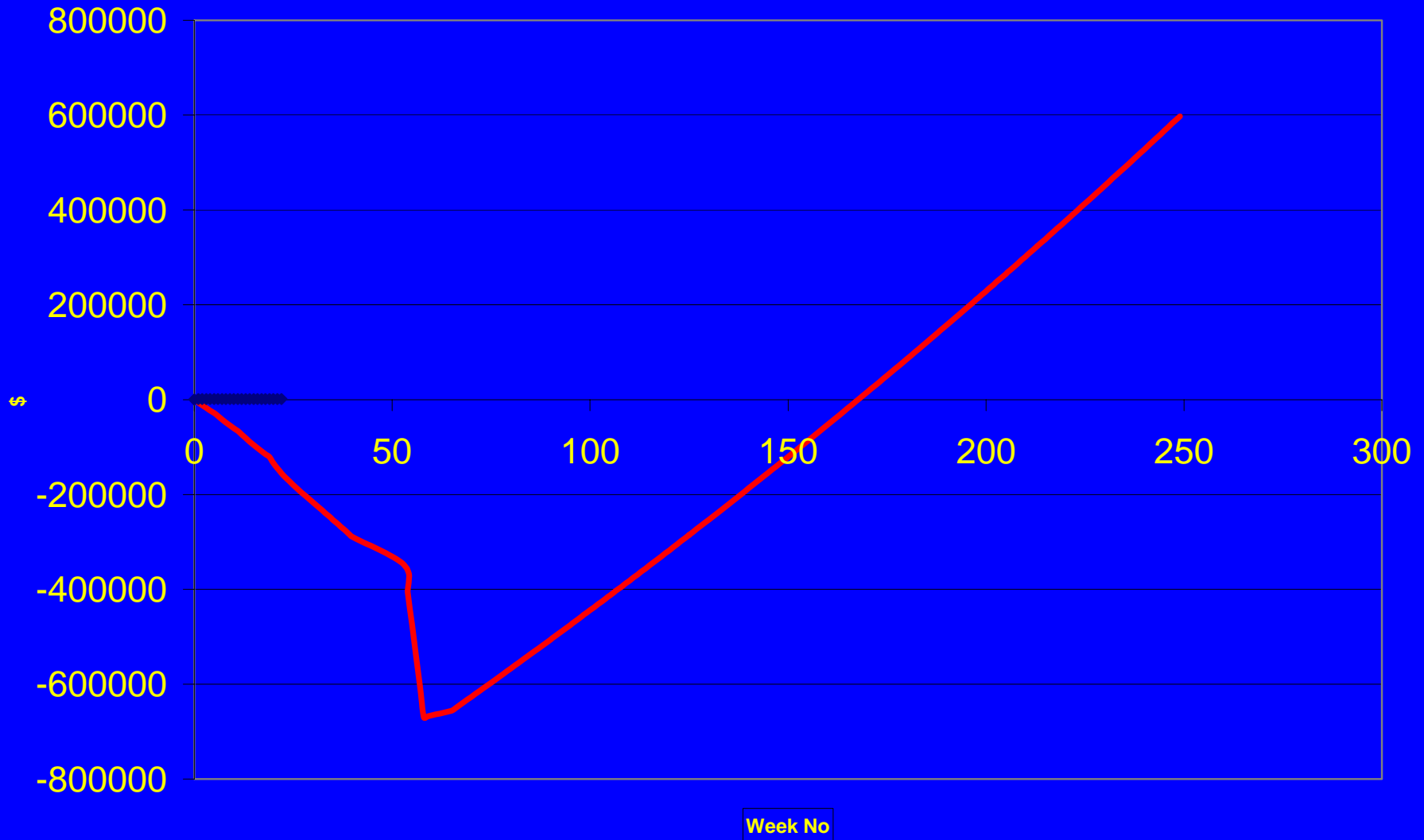
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Ensure > 10  
mths of age

- Weaner area
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Move off site

# Cashflow for Total Depopulation of 1000 sow operation



# Cashflows cf Total and Swiss Depopulation for 1000 sow Operation

