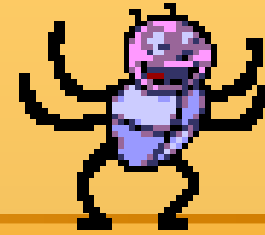
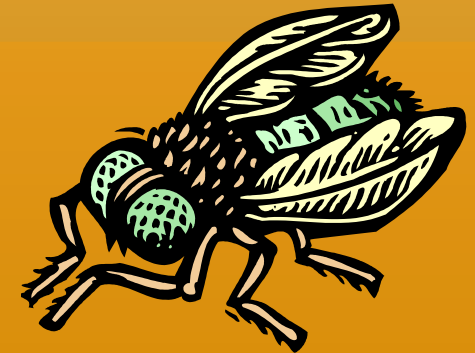
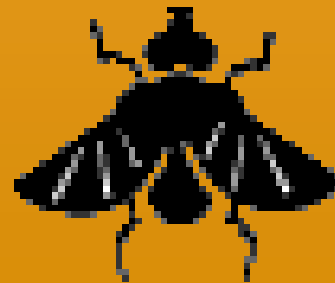


# **Internal and External Parasites**

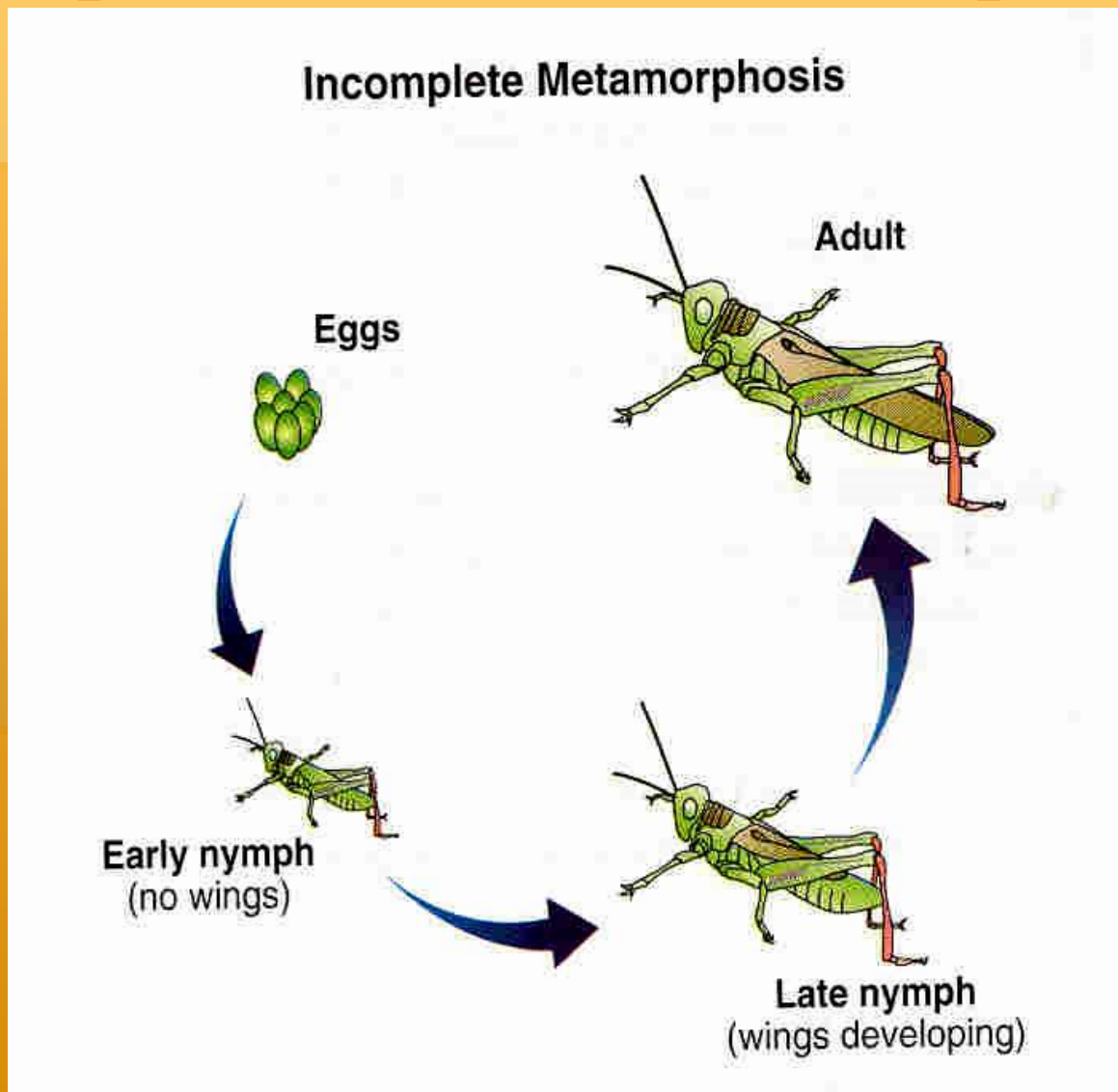
# Metamorphosis



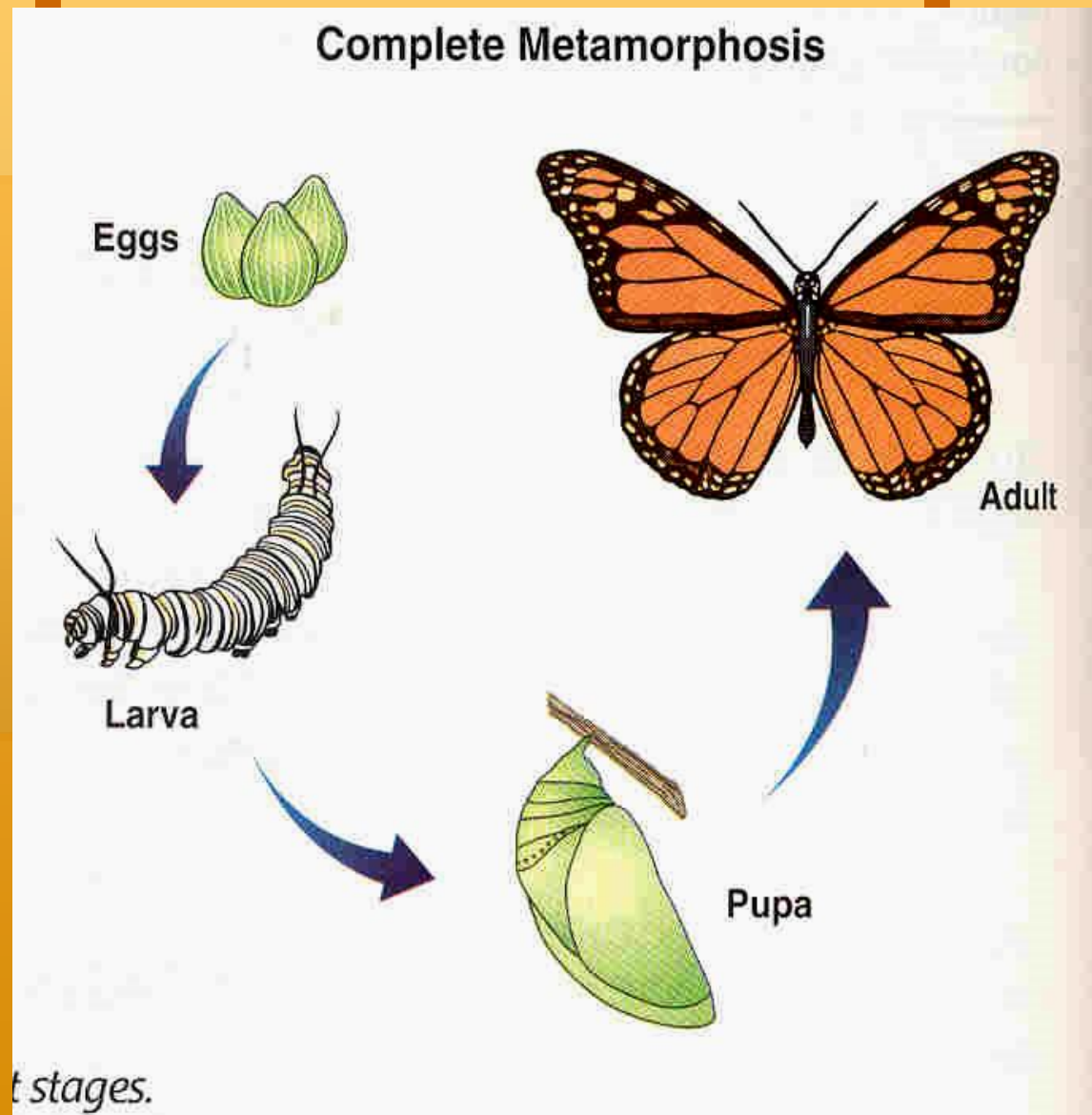
- The process by which organisms change in form and structure in their lives, such as insects do.



# Incomplete Metamorphosis



# Complete Metamorphosis



# Points for Informational Fact Sheets

- Name of parasite
- Description of parasite and its life cycle
- Symptoms of infection that the host animal may exhibit
- What the parasite does to the host animal
- How the parasite can be treated
- How the parasite should be prevented or controlled

# Key points for informational fact sheets

- You need to be factual, precise and to the point.
- You need to work effectively and efficiently as you will have the rest of this period and the first part of the next period to finish these sheets.
- Ask for assistance if you need it.
- You can use an animal science book, The Stockman's Handbook and the Internet for your information. I would suggest first checking both books by looking up parasites in the index.

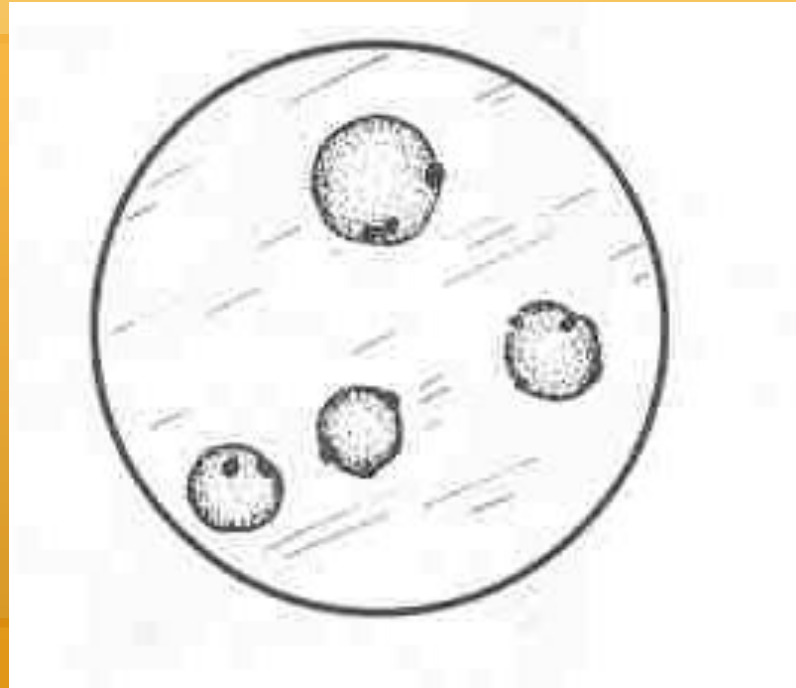
# Key points for informational fact sheets

- You will tell the class about your informational sheet when you hand them out to the class.
- We will need to have enough copies of your informational sheet for the entire class – see me about how to get that accomplished.
- You will be graded on the completeness of your informational sheet based upon the check sheet I will hand out as you begin working.
- Lastly, if you can find a picture of the parasite – that would be good to include.

# **Additional Scanned Images for Instructional Use**

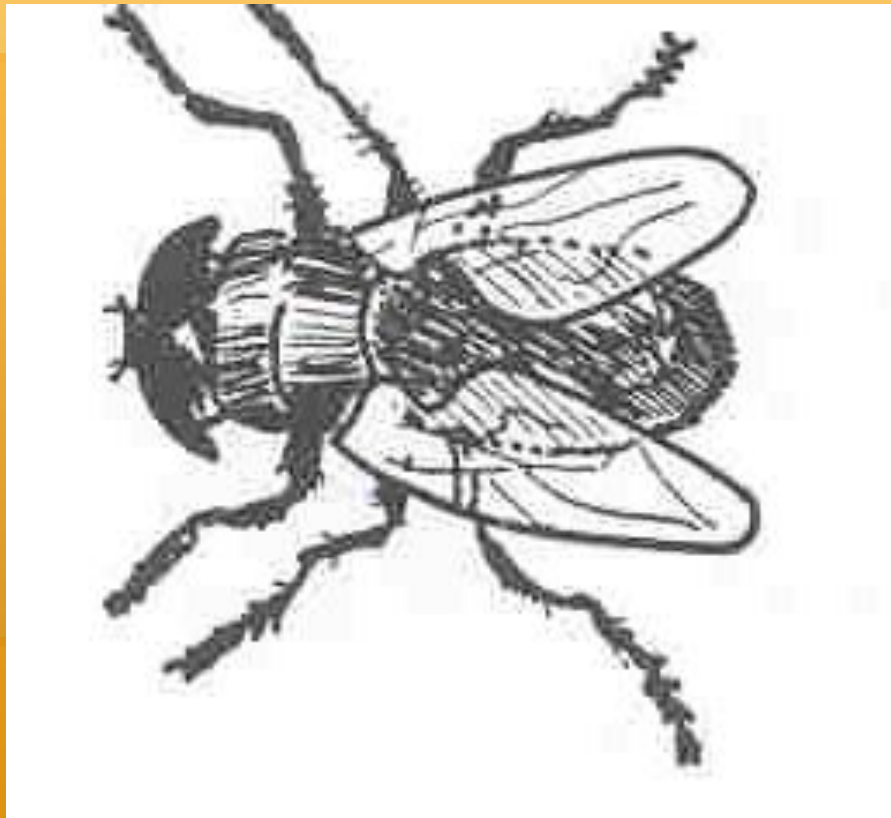


**Greatly enlarged red blood cells from an animal with anaplasmosis – the black dots near the margins of the cells are *Anaplasma marginale***



From The Stockman's Handbook, Ensminger

# Blow Fly



From The Stockman's Handbook, Ensminger

## Effect of Heel flies on heifers

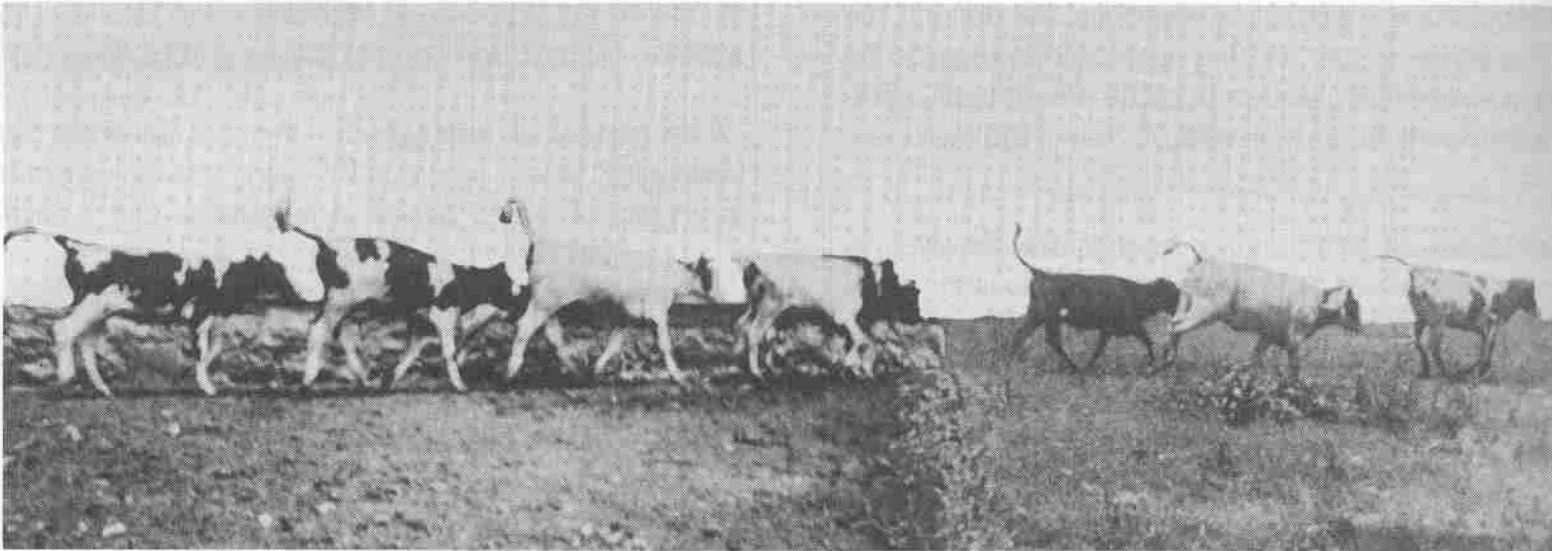


Fig. 10-88. Heel flies. Heifers running away from heel flies, the maggot stage of which is the cattle grub. Though the fly does not bite or sting, when it lays its eggs on the lower leg, it usually terrifies the animal, causing it to run with tail hoisted, seeking relief. (Courtesy, Livestock Conservation, Inc.)

From The Stockman's Handbook, Ensminger

## Face flies on cow



Fig. 10-86. Face flies on cow. (Courtesy, R. E. Williams, Professor of Entomology, Purdue University, West Lafayette, IN)

From The Stockman's Handbook, Ensminger

## Grub under skin



From The Stockman's Handbook, Ensminger

# Horn flies on cow

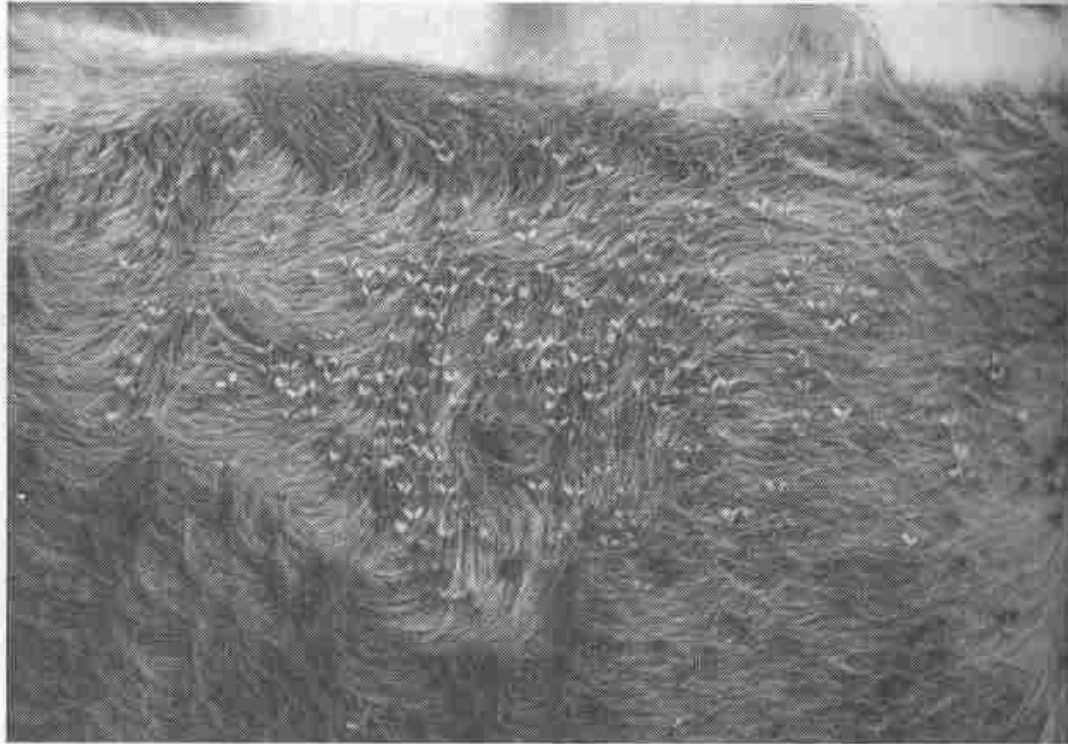
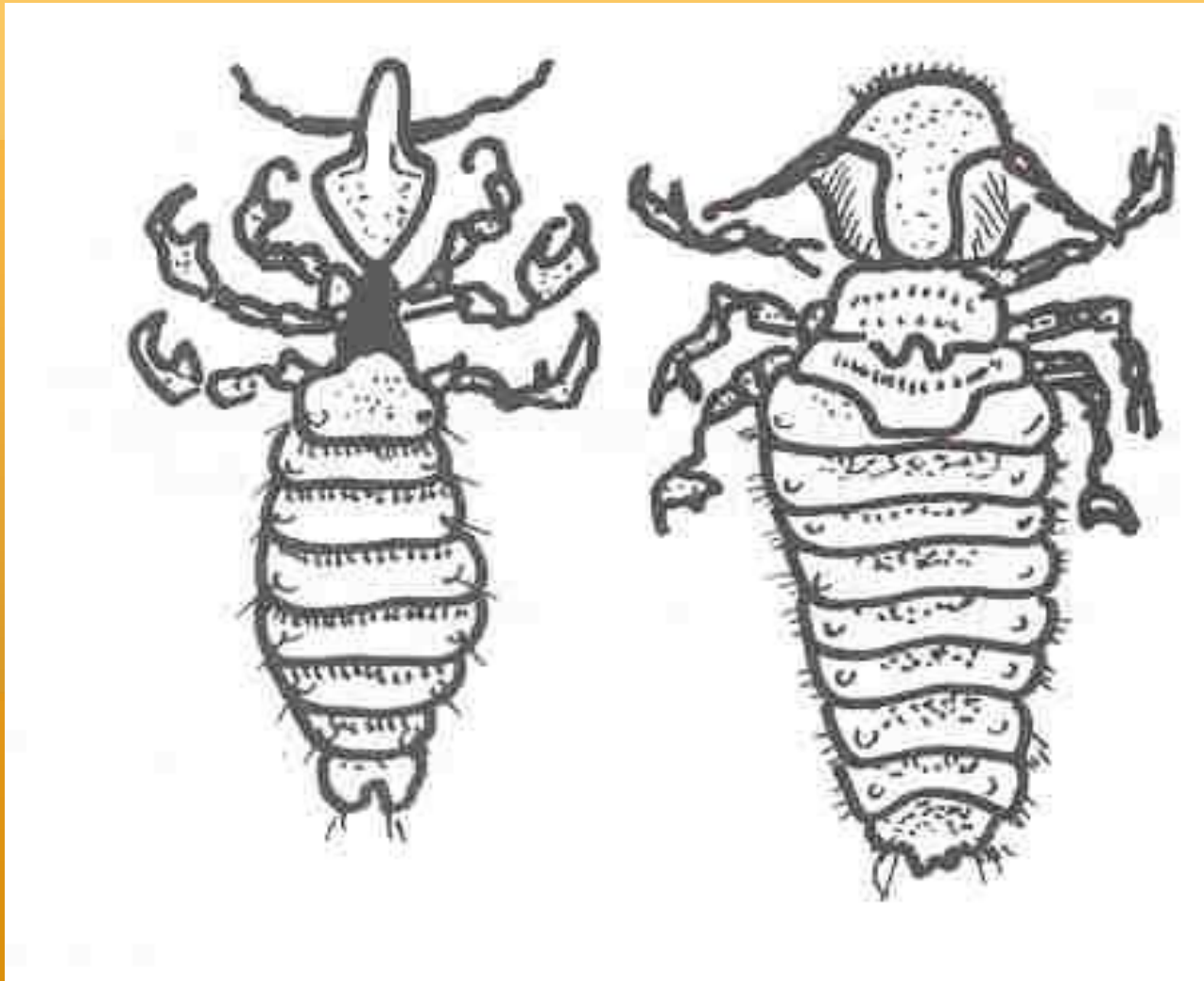


Fig. 10-87. Horn flies on cow. (Courtesy, R. E. Williams, Professor of Entomology, Purdue University, West Lafayette, IN)

From The Stockman's Handbook, Ensminger



# Lice



From The Stockman's Handbook, Ensminger