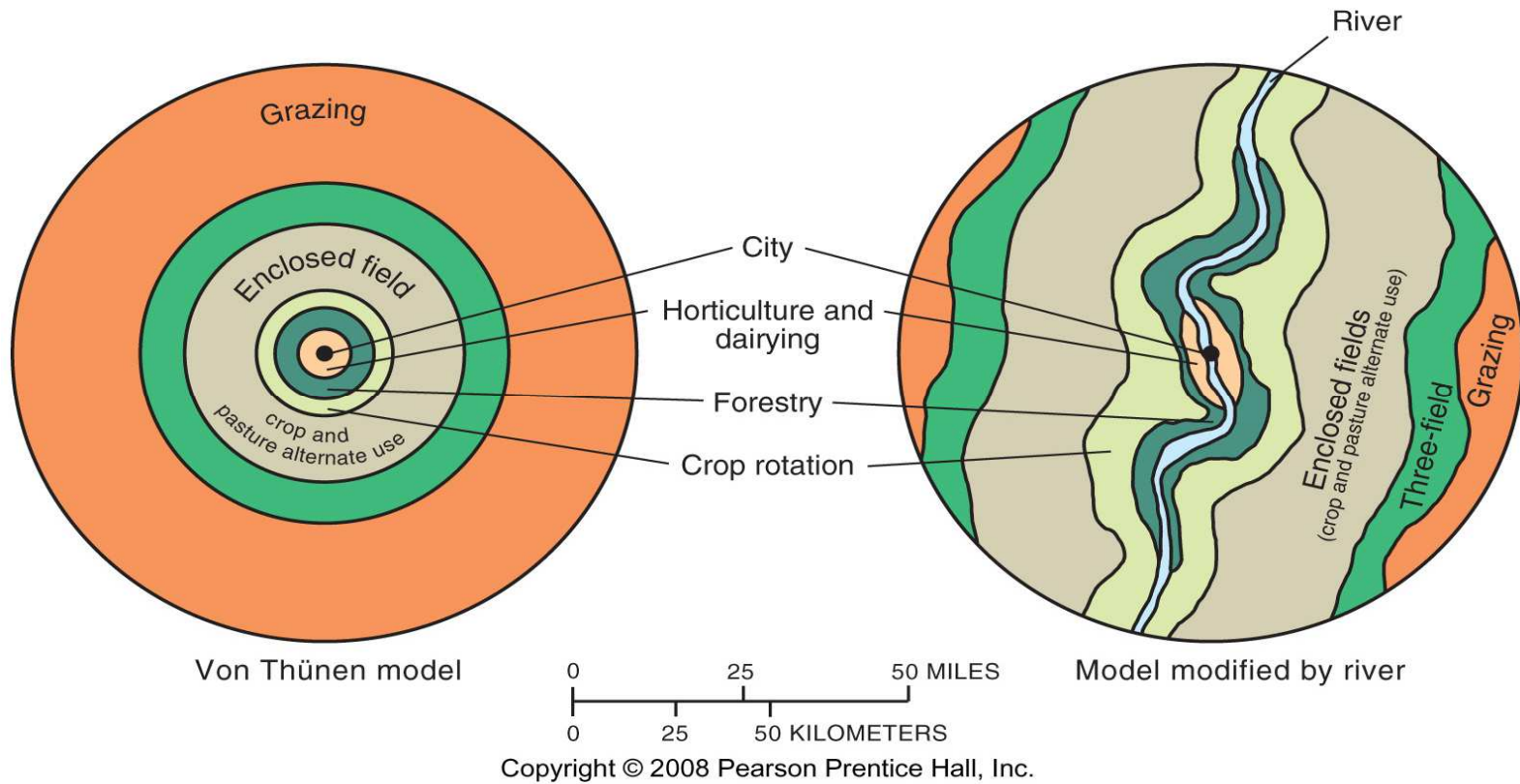


Von Thunen Model

- Used to explain the importance of proximity to market in the choice of crops on commercial farms
- 1826 Germany
- Cost of land vs. Cost of transporting to market
- The value of the yield per hectare
- The cost of transporting the yield per hectare

Von Thunen Model



Von Thunen Today

- Still a good basis for understanding farmer considerations but...
- Timber forests no longer surround cities
- Refrigeration and trucks and highways allow farms to be farther away
- Not all farms grow crops just for human consumption anymore (ethanol, corn plastics, food for livestock)

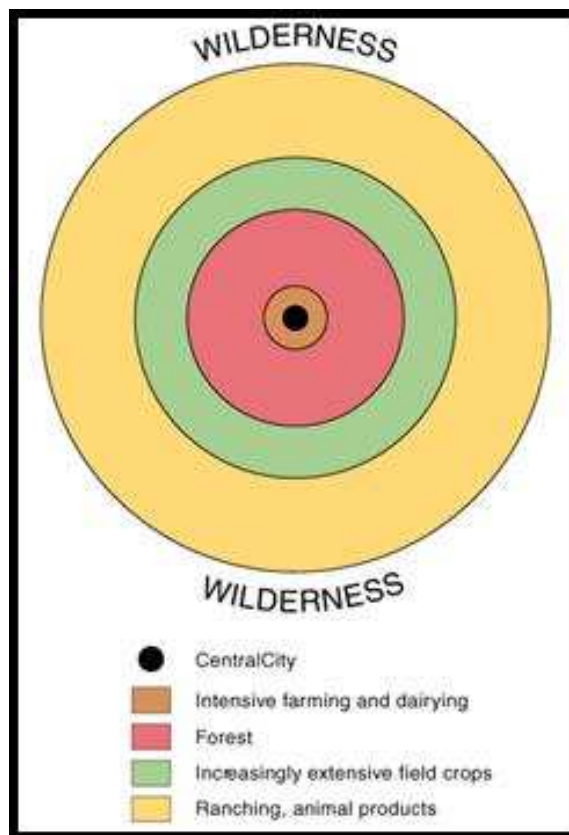
Who was von Thünen?

- German farmer and economist
- 1826 wrote down his ideas
- Noticed that one crop or commodity gave way to another as one moved away from the market (city)
- Each market, or city, had its own “concentric rings” around it
- Also noticed that farmers near the market produced very different things than farmers far from the market

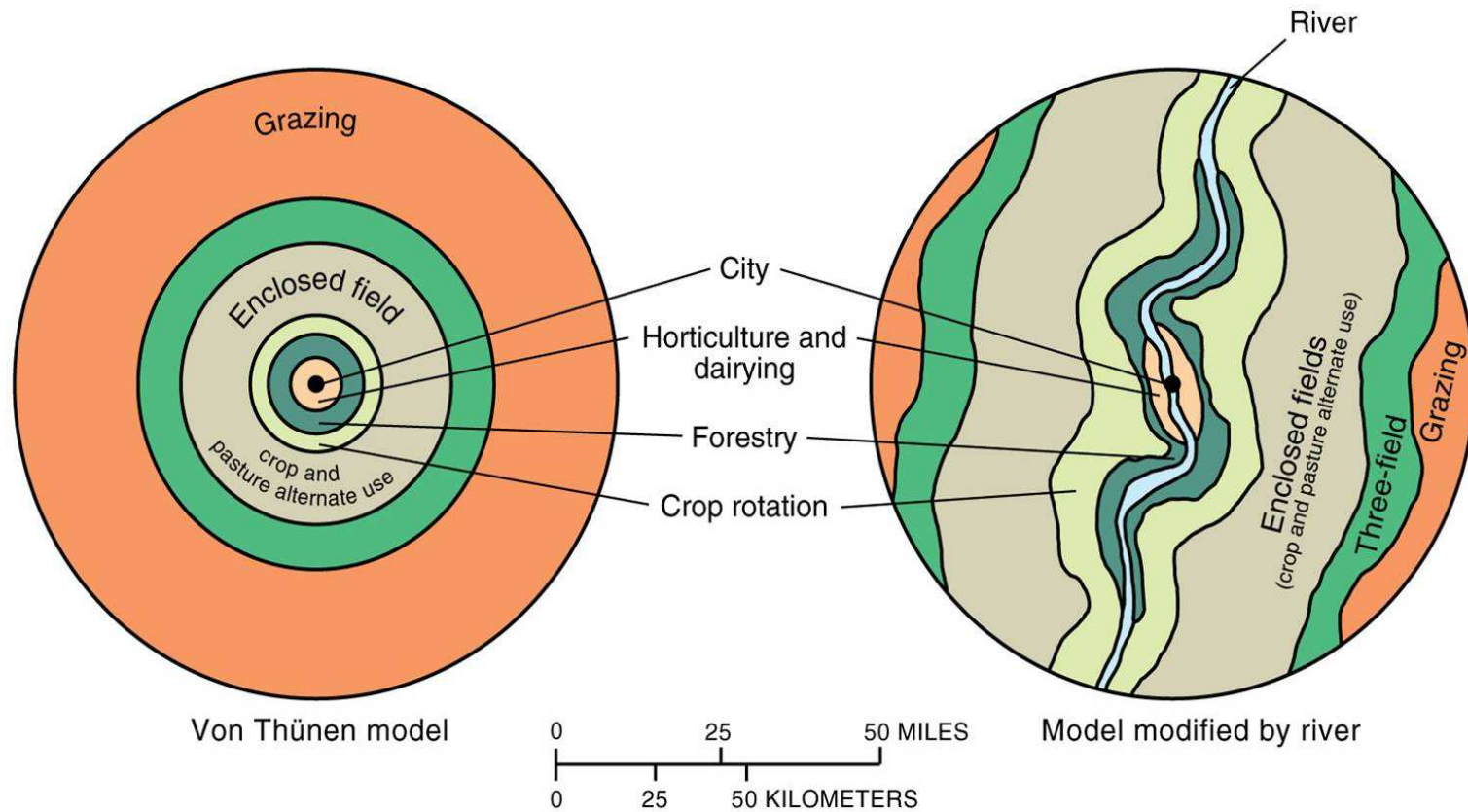
Assumptions of the model

- The market is a central *Isolated State*
- The *Isolated State* is surrounded by forest
- The terrain is homogeneous, flat, isotropic plane and has no rivers or mountains. There are no barriers to transport for farmers to bring their goods to market
- Soils and climate are even and consistent
- Farmers behave rationally to maximize profits

The classic model

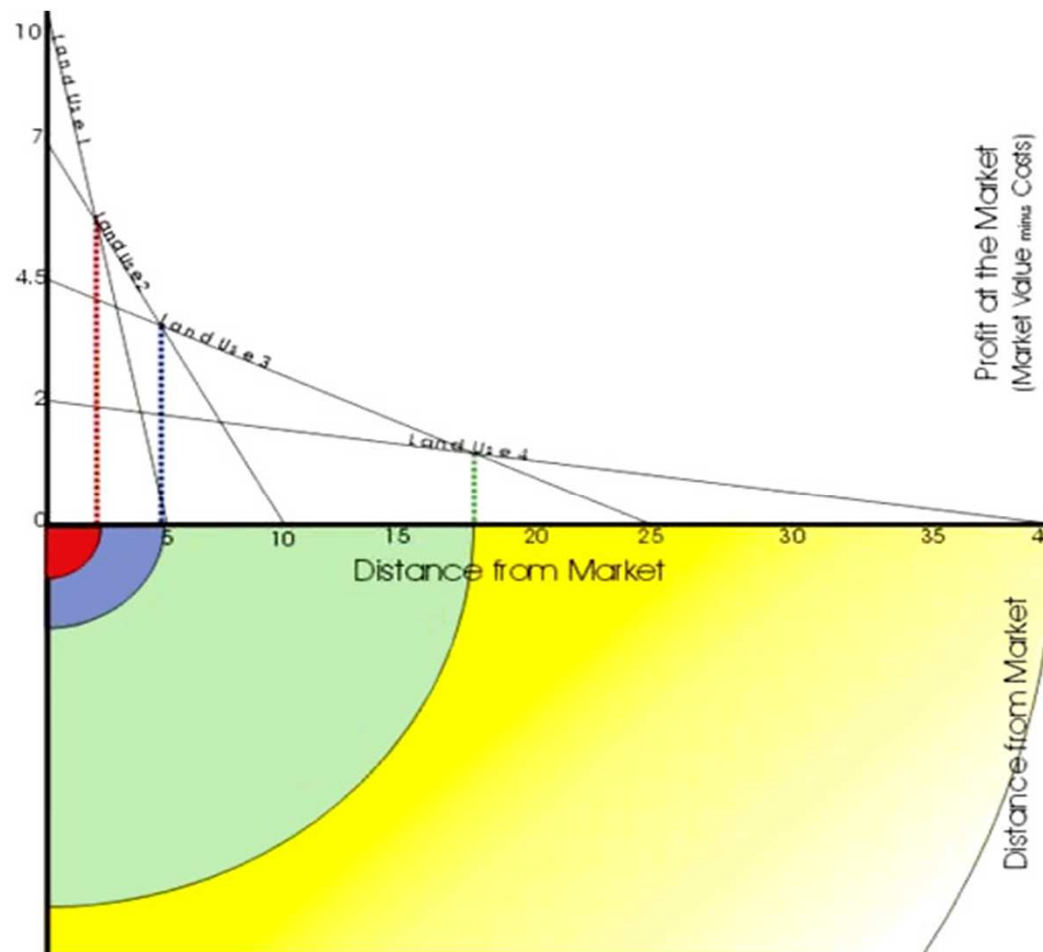


A “modernized” look



Copyright © 2005 Pearson Prentice Hall, Inc.

Yet, another look

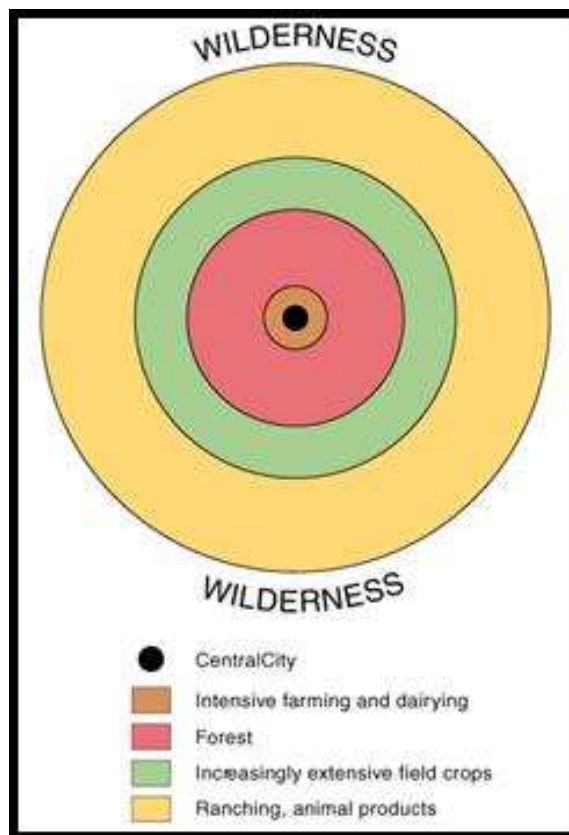


<http://www.csiss.org/classics/uploads/vonthunen2.jpg>

Main factors of v.T.

- Land rent or cost = Bid Rent
- Labor costs
- Transport costs (distance to market)
- Production costs

The classic model again



Modern usefulness of von Thünen: What has changed?

- Refrigeration and freezing
- Preservatives – vacuum packing, canning, chemical and natural preservatives
- Modern transport systems – containers, trucks, ships, planes - flowers flown into NYC from the Caribbean
- Factories/Agribusiness or Industrial Agriculture
- Where do Farmer's Markets fit into von Thünen?