

Biol. 221

Study Questions for Article 7

Article 7 - Storey and Storey 1990

- 1) How can the formation of ice crystals damage cells?
- 2) What is supercooling and how is it achieved?
- 3) What risks are associated with avoiding freezing through the processes of supercooling?
- 4) What are the 3 conditions that must be satisfied for an animal to survive freezing? And how are these conditions achieved?
- 5) How does the formation of ice outside a cell alter the water & solute balance inside the cell?
- 6) What are 5 reasons why glycerol & sorbitol are considered to be excellent cyroprotectants?