

Thursday Reading Assessment: Chapters 9-12 of *Last Place on Earth*

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1 Chapter 9 - Robert Falcon Scott, R.N.

1. What was the primary function of Sir Clements Markham as it relates to the first expedition of Robert Falcon Scott?

2 Chapter 10 - Divided Aims

1. At a meeting of the Seventh International Geographical Congress, Sir Clements Markham (then President of the Royal Geographical Society) read an essay discouraging the use of dogs as a draught animal. Fridtjof Nansen was there, and rebutted him. Provide a short summary below of the arguments for and against the use of dogs.
2. One scientist appointed by the Royal Society to accompany Scott on the expedition wrote that with dogs “every pound of food will allow us to go four miles further South.” Assume that dogs can pull with a force of 100 N at their peak, and assume a sled is being pulled by 10 dogs. (a) With what total force can the team pull? (b) Assume that this particular breed of dog requires 2500 kcal/day. How many kcal would the team need per day? (c) Assuming a food-energy density of 9 kcal/gram, how much mass of food do the dogs need per day? (d) If you have 300 kg of food, for how long will this feed the dogs?

3 Chapter 11 - An Antarctic Winter

1. What island did the *Discovery* discover? *Hint: it has a volcano, and is the current location for the main base of the United States Antarctic Program.* What were some of the activities of Scott and his men there?
2. The men on *Discovery* attempted to divide the sledge dogs into small competing teams. Based on routine animal behavior, what was the result? How did Amundsen learn to avoid this type of problem, or, from whom did he learn?
3. Summarize how the men of the *Discovery* avoided scurvy.

4 Chapter 12 - Scott's Furthest South

1. Scott, Shackleton, and Wilson made camp on a 12 week venture at $82^{\circ} 15'$ South, which was a record for "furthest south," since no one had yet made it to the (geographic) South Pole. This means that they were 7.75 degrees from the South Pole. If 1 degree of latitude corresponds to 111 km, how far were they from the geographic South Pole?