PROBLEM:

Comparative analysis of productivity.

Note: All calculations are to a sig fig of .1

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| --- | --- | --- | --- | --- |
|  | g/protein per oz. | Time to harvest days | Energy consumed | Water needed (Approx.) |
| Brazil Nuts | 4.0 | 180 days | 2 ft2 |  |
| Flax | 6.4 | 180 days | 4 ft2 | Only needed in dry climates |
| Pumpkin | 9.0 | 75-100 days | 2 ft2 | Not much if any |
| Salmon | 7.0 | 24-32 months | 8 ft3 | 8 ft3 |

1. How does this relate to primary productivity
   1. This relates to primary productivity because it compares the efficiency of each plant in various categories and shows with hard data that primary producers are more efficient food sources then consumers.
2. Assuming you eat one oz of beef… what is the downside of the use of resources in relation to trophic levels. I.E. Pyramids
   1. One oz of beef has approximately 71 Calories (if it is the average 85% lean), in order for that cow to have 75 Calories it had to consume 710 Calories (approximation based on accepted assumptions) you only get 10 % of energy when energy transfers up one trophic level. Taking in to account crop land to feed a cow, you get 1.1 million Calories per acer of cow farming. One acer of corn farming produces 12.3 Million calories.