

proportion of females are annually killed in all carefully managed herds without injury.

The above natural increase has been taken at Mr Phelps, valuation. Without endorsing the exact accuracy of that valuation, it is clear that a large natural increase must exist which needs to be credited in any correct computation.

The argument that the killing of every breeding female decreases the herd *pro tanto*, in a geometrical ratio, is obviously untenable, otherwise those "indiscriminate" pelagic sealers the killer-whales and the native Indians would have long since destroyed the whole number of seals.

Inasmuch as the tables of Mr Phelps are based on the Diagrams of the United States, Commissioners, it becomes desirable to examine these Diagrams somewhat more closely.

II. The two Diagrams (A) and (C) are given by the United States' Commissioners to show the effects of "properly regulated" killing upon land. They relate to the male portion of a hypothetical "herd," which in its natural condition would amount to 40,000 males and 40,000 females, but which if land killing took place would, according to the United States' Commissioners, be reduced to 23,568 males and 40,000 females.

The same conclusions would hold true whatever the whole number of seals was, it being only necessary to increase the figures in due proportion.

These two Diagrams relate to male seals.

United States' Case,  
p. 352.

United States' Case,  
p. 352, line 12.

Diagram (C), p. 355,  
and United States'  
Case, p. 357, line 1.

#### EXPLANATION OF THE DIAGRAMS.

1. Along the lowest horizontal lines are arranged a number of figures representing successively the ages of the male seals. Opposite each of these figures is a vertical line representing by its length the number of male seals which there are in the "herd," of the age represented by the figure.

Diagram (A) represents the male "herd" of 40,000 seals in its natural state, according to the opinion of the United States' Commissioners, and before any killing by man has taken place.

United States' Case,  
p. 352.

From the Diagram it is apparent that in this "herd" there would at any given time be 10,000 male pups under 1 year old; there would be 5,000 yearlings or males under 2 years, but over 1 year old; 3,200 2-year-olds, or males over 2 years of age but under 3 years old; 2,400 3-year-olds; and so on. And it is quite evident that the total number of male seals in the "herd" may be obtained by adding together all the columns. In Table (a) annexed, the figures have been extracted from the United States' Commissioner's Diagram (A), and added up. The total comes to 40,025, and agrees with the total marked on the United States' Diagram (A).