

Wright's Coefficient

THE following chart is provided to clear up any misconceptions or lack of clarity about Wright's coefficient of inbreeding.

"Because the degrees of inbreeding vary, it is desirable to have some standard measure by which it can be determined. Wright's coefficient, the one most commonly used, is as follows." **

$$F_x = \sum \left(\frac{1}{2} \right)^{n+n'+1} (1+F_A)$$

where

- F_x = coefficient of inbreeding of the animal X
- n = number of generations from the sire of X back to some ancestor common to both sire and dam
- n' = number of generations from the dam of X back to that same common ancestor
- \sum = summation of the separate contributions of each different common ancestor
- F_A = coefficient of inbreeding of the common ancestor (A) when that animal is itself inbred