

GENETIC LINKAGES (Link Sires)

Genetic linkage is established by the use of common sires across herds. To compare animals from different environments, herds must have some performance recorded progeny from common animals (typically common sires), which are used to bench mark one herd against another. Genetic linkage is also important within a herd, to compare animals born in different years and raised in different contemporary groups. At the within herd level, link sires provide linkage between contemporary groups and dams can provide additional genetic linkage across years.

Example of how to achieve links:

Year and bulls used			
2014	2015	2016	2017
AI Bull A	AI Bull A	Herd Sire D	Herd Sire E
Herd Sire B	Herd Sire B	Herd Sire E	Herd Sire F
Herd Sire C	Herd Sire D	Herd Sire F	AI Bull B

Assume the following three bulls – AI-bull A, herd sire B and C - are used in 2014 breeding season. In 2015, you decide not to use herd sire C but herd sire D. Thus, AI Bull A and herd sire B is still used and so links are established within and between herds for the years 2014 and 2015. If there is not an AI bull used, links can still be established by using one of the previous years' sires together with the new sires, as seen in the year 2016. If in the next year an AI bull is available, he can be used with the sires of the previous year.

For more information go to <http://sbts.une.edu.au/pdfs/TTMay15.pdf>