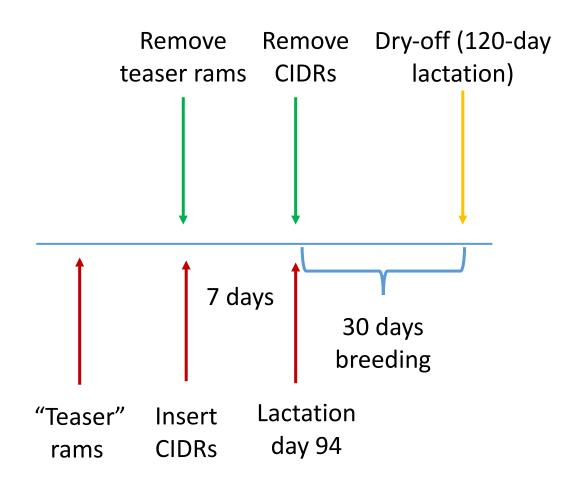
Cornell Sheep Dairy Protocol for Synchronizing Ewes for Year Round Breeding

The first three years of the project ewes were primarily Dorsets and Finn-Dorsets selected for several generations for out of season breeding. Thus, it might be argued that CIDRs (controlled internal drug releasing devices) were not necessarily needed for breeding them even during the anestrus period. However, one motivation for using CIDRs was to achieve a narrow lambing interval during each lambing period. In addition, ewes in 2019 were all at least 25% East Friesian, a breed considered to be seasonal breeders.

During each breeding cycle, the protocol was to expose the ewes to vasectomized teaser rams for 10 days. The rams were then removed and progesterone impregnated intravaginal inserts, i.e. CIDRs, were put in the ewes. After 7 days the CIDRs were removed and fertile rams were introduced into the breeding group on the same day. Rams stayed with the breeding group for 30 days.



| Table 1. Reproductive success using the protocol | | | |
|--|-----------------------------|-----------------|------|
| | Dorset and Finn × Dorset | ¼ East Friesian | |
| | | Feb | Oct |
| Reproductive Performance | 2016 to 2018 | 2019 | 2019 |
| Lambing rate, % | 87 | 83 | 74 |
| Conception within 17 days, % | 86 | 83 | 100 |
| Lambs born per lambing per ewe | 2.4 | 1.5 | 1.8 |
| Live lambs per ewe | 2.3 | 1.3 | 1.8 |