

## **Drought Management of Beef Cows**

This decision-aid is intended to help producers make decisions about their breeding cow herd in the face of extended drought. The spreadsheet presents the results of five different management alternatives. 1) Pasture and Feed—this alternative assumes the producer will keep the cows in their home pasture and feed them 100% of the feed they need to maintain a desired level of production. The output of this alternative is the dollar cost per head to pasture and feed. 2) Ship To Grass—this alternative assumes the producer will ship their cows to green grass pasture that has been leased in a location away from the drought stricken area e.g. Montana, North Dakota, Kentucky, etc. The output of this alternative is the dollar cost per head to ship to grass in another area and maintain. 3) Destock and Restock—this alternative assumes the producer will liquidate the entire cattle herd and then repurchase breeding stock after the drought breaks and pastures have recovered. The output of this alternative is the dollar amount obtained from selling the breeding herd plus savings accrued by not feeding or owning the herd for the duration of the drought. This is expressed in dollars per head available to repurchase breeding stock. 4) Embryo Transfer—this alternative assumes the producer is convinced their herd contains genetic traits that may be difficult or impossible to replace. Oocytes will be harvested from these select cows. Those will be, in-vitro-fertilized and the embryos can then be frozen indefinitely. After the drought breaks, the embryos will be transferred to recip cows and the pregnancies taken to term. The output of this alternative is the cost of the pregnancy, including the cost of the recip cow and this cost can be adjusted for pregnancy rates expected for either conventional or sexed semen. The fifth option is Feed Cows In Feedyard—this alternative assumes the producer ships his cows to a custom cattle feedyard facility where they will be confined and fed to maintain a desired level of production for the duration of the drought. The output of this alternative is the cost per head for each cow in the herd. There is also a summary tab which compares the results of all five alternatives side-by-side.

There is a central database (Input Prices and Costs) of costs for protein supplements, hay and roughage, pasture lease, caretaking cost, costs associated with embryo transfer, and other miscellaneous costs. Changes here are transferred to the five production alternatives and used in calculations.