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## Planning a Herd Depopulation Repopulation

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When does the pain of living with the cost of chronic diseases in the herd become great enough to consider herd depopulation? Understanding the cost and potential benefits are critical. Depopulation and repopulations can be done with a minimum of down time in the unit, which makes it a more cost effective procedure. This is more difficult to accomplish requiring more detailed planning to be effective.

### Deciding to depopulate

Determining the goals of the project is the best place to start. In this example one of the following goals:

- 1) Minimal amount of downtime for production (30 days).
- 2) Disease problems to eliminate
  - a) PRRS
  - b) Mycoplasma

There may be an opportunity to improve the genetics. In some sow herds there may be parity distribution problems that can also be corrected and reduce the potential cost.

Evaluate the likelihood of being able to accomplish these goals. How long can it be maintained is an important question to answer.

### Financial Impact

Using a partial budget is a good way to evaluate the impact of depopulation. Building a spreadsheet model is a very good way to do this so that you can run different scenarios through the model. Running an optimistic and pessimistic model will satisfy everyone on the production team as well as the lender.

### Stocking

This is one of the first jobs that must be done. It's very important that you do a detailed vet-to-vet, including: sourcing of herd, replacements, isolation protocols, genetic lines available, location, farm biosecurity protocols, and vaccination protocols.

Serologic monitoring is the next phase to make sure that there are not subclinical diseases present in the herd. A standard set of diseases to monitor would include: PRRS, Mycoplasma, swine influenza virus, TGE/PRCV, and APP.

Monitoring both the finishing herd and sow herd is important to see if there are any differences between the populations. Testing a statistical sample of both (30 sows and 30 finishers).

### Planning the Pig Flow

The hard work really begins in the planning phase. If adequate time is devoted to the planning phase, it can really help to ensure that it will be a successful program. The best is to be able to plan a year ahead of time but a minimum of 4-6 months is necessary to make sure that everything is ready.

The first step is to evaluate the overall production system. What resources are available and what will have to be added. In multiple site systems it will be easier to minimize the down time. If there are multiple sow farms, then decide if all farms will be done at once in phases. The multiplication phase is a good place to start so that replacements will be available as soon as possible. With multiple farrowing sites, it is possible to use the existing inventory in the farms that have not yet been depopulated helping reduce the cost of early culling animals.

To plan the flow a good tool is to build a spreadsheet that details all the processes in the depopulation and repopulation. Using a color-coded system will help to distinguish between new and old herd activities. This way everyone in the entire system can chart the progress of the project. Using a spreadsheet format and linking the events to the stocking date, any changes to the stocking date that occur, automatically recalculates the entire schedule. Charting the breeding numbers in the new and old herds can be used to predict the pig flow once the animals are bred using some assumptions in the model. These predictions are helpful in making sure that there is enough space available in the system. This should give enough time to get everything adequately cleaned, disinfected, fumigated and with adequate downtime before repopulation.

### Summary

Once the herd has decided to depopulate there are many steps to the completion of the project. The more time spent planning will help minimize the chance of mistakes and ensure the goals are met. Clear communication between all the team members is also key so everyone knows the progress of the project and what is expected of them. The plan has to be a living document continually being updated with necessary changes.