## Database Scenario: Farm Cooperative

A large farm cooperative (a group of farms who pool their outputs to maximise profit and efficiency) needs a database to store information about its members, their farms, their outputs and their suppliers. Data must be stored about:

1. Individual farms, with crops grown and/or livestock carried
2. Crop and animal production
3. External suppliers (e.g. sellers of equipment, veterinarians, etc.)
4. Deliveries from suppliers to individual farms.

At a minimum, the database should be able to provide information about individual and total crops and livestock, patterns of expenditure, types and numbers of external suppliers, and patterns of crop and animal outputs. Consider also any further functionality that would be of benefit to this community.

## Database Scenario: Orchestra Management System

Develop a database that the New Zealand Symphony Orchestra could use to hold information about its personnel, concert schedules and programmes, and ticket sales. At a minimum, data must be stored about:

1. Concerts performed each season (there is one season each year), including date, location, etc.
2. Compositions played at each performance.
3. Soloists, conductors and orchestra members for each performance.
4. Ticket sales.

The orchestra wants to be able to use the database to track its income and expenses. Thus individual salaries must be stored. Musicians’ salaries differ based on seniority, soloists who are members of the orchestra get a bonus, and visiting soloists are paid a contract fee. Ticket prices must be stored, and ticket price depends on the seat location in the venue (i.e. main floor, gallery, stalls, etc.) The database will also be used to insure that the same compositions are not repeated too frequently in the same town, and that a sufficient number of New Zealand composers are being included.Database Scenario: Wildlife Parks

You are to construct a database for a company that manages a number of large wildlife parks. The database will be used to monitor all aspects of park life and management. Information should be stored about:

1. Individual parks
2. Individual animals
3. Veterinary checkups
4. Animal dietary requirements
5. Park staff
6. Park attendance

These wildlife parks allow limited free roaming (i.e. the animals are not in cages, but are restricted to defined areas of the park via fences and landscape features). Regular inspections are made to observe each animal, and careful records must be kept of the location, condition and behaviour of each animal at each inspection. You will need to devise some representation of location within a park. Records of individual animals are persistent when the animal dies or is moved to another park.