Animal Health
Dr. Ashley M. Stokes

What are the important things we can do to improve health?
How can we keep them healthy?

Key things they need:
- Beef cattle
- Pigs
- Chickens/Ducks
- Goats

Key things to do for them:
- Nutrition
- Housing/field conditions
- Stress
- Management
- Prevent disease
How can we keep them healthy?

- Basics of health management:
  - Not all losses and diseases can be prevented, but good management can reduce these problems

- Outcomes of disease:
  - Animal can die – loss, but not as common
  - Animal can get sick and eventually recover – MAJOR LOSS, most common outcome, problem is loss in production, treatment costs, labor costs, weight loss, potential spread to other animals
    - Can be obvious and sick
    - May not be so obvious but results in same problem - loss!
Animal health

- Principles of health
  - Healthy animals take care and attention
  - Good nutrition
    - Good quality food = less disease
  - Housing/shelter
    - Protection from sun, heat, rain, winds
    - If kept in houses, need good ventilation
  - Clean
    - Keep things clean and in good repair
  - Check animals often
    - The sooner the better
Pigs

- How to tell if they are sick
  - Growing pigs sleep a lot
  - Wake easy
    - Move around, move to corner, make noise, then show interest
  - Stay very close together
  - Don’t get pushed around by pen-mates
  - Ears should be up, curl in tail
  - Is body condition similar to others?
Pigs

- How to tell if they are sick
  - Normal temperature is 101.5 F
    - Can range 100.4-102.8 in normal animal if hot/humid
    - Can be up to 103.5 in piglets
  - Normal breathing rate is 15 breaths/minute
    - Piglets will have higher breathing rate at 30
Pigs

Body condition score

- Check and write down at breeding, mid-pregnancy, farrowing
- 1-5 points (different that the scores for cattle)
- 1 = really skinny
- 5 = obese
- *3.5 = perfect for breeding and health*

- Have to press with hands to feel backbone and hips
Chickens

- How to tell if they are sick
  - Search for feed/scratch
  - Should stand strong
  - Head should be strong
    - Take up water into beak and raise head
  - Vocalize when disturbed
  - Take care of feathers
    - Not feather plucking
  - Bright eyes and comb
  - Soft, formed droppings
Chickens

- How to tell if they are sick
  - Normal temperature is 103-109.4 F
    - Not really taken though
  - Normal breathing rate is 12-36 breaths/minute
    - No sweat glands
    - Will pant if too hot or stressed
Chickens

- **Body condition score**
  - Check and write down
  - 0-3 points (different from the scores for other animals)
  - Holding upside down, feel breast bone
  - 0 = really skinny
  - 3 = obese
  - *2 = perfect for laying and broiler*
Beef cattle

- How to tell if they are sick
  - Resting too much instead of eating
  - When put in a new place to graze, they don’t
  - Don’t have a good shape (flat sided)
  - Droopy ears
  - Head held low
  - Humped back
  - Limping
  - Runny nose
  - Diarrhea
Beef cattle

- How to tell if they are sick
  - Normal temperature is 101.5 degrees F
    - Can range in normal animal 99-103 if in sun/hot/humid/dark color of hair
  - Normal breathing rate is 10-30 breaths/minute
    - Higher end for hot/humid/dark cattle
  - Calves will have higher breathing rate at 15-40
Beef cattle

- **Body condition score**
  - Check and write down at least twice a year
  - See Dr. Thorne’s notes
  - 1-9 points
  - 1 = really skinny
  - 9 = obese
  - *5-6 = perfect for breeding and health*
Goats

- **How to tell if they are sick**
  - Very strong instinct to stay with herd
  - When scared, form a line and watch
    - +/- Sneeze sound
  - May not show signs of being sick or may be subtle
  - Alert eyes, upright tail
  - Browsing for feeding
Goats

- How to tell if they are sick

  - Normal temperature is 102.3 degrees F
    - Can range 101.5-103.5 in normal animal if sun/hot/humid dark color of hair
  - Normal breathing rate is 12-20 breaths/minute
    - Higher end for hot/humid/dark goats
Goats

- **Body condition score**
  - Check and write down at least 4x a year
  - First lumbar vertebrae (right behind ribs – feel muscle)
  - 0-5 points
  - 0 = really skinny
  - 5 = obese
  - *3 = perfect*
Example 1

- **Pig**
  - Pig has been growing fine until recently, feces are normal, respiration is normal, no fever
  - Over time getting worse, a lot of scratching of the skin, shaking of the head, reddish skin and ears, now one swollen ear that is flopped down
  - Loss of body condition by 1 full point very recently
Example 1

- Pig
  - Exam shows dark crusty material in ears
  - Look at this material under a microscope
  - Check other pigs and find that more than one pig has this
Example 1

- Sarcoptic Mange – a mite/insect
Example 1

- Pig
  - Finding is Sarcoptic mange
  - If left without treating, will not kill the pigs, but will cause decreased gain of weight and decreased breeding
  - Treat with ivermectin injectable – note how long you need to wait before slaughter
  - Since it spreads to many animals (often 15/100 animals) – probably will need to treat all of them
Example 1

- **Pig**

- Finding is Sarcoptic mange
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- Ear flopped down – formed a blood pocket in the ear because of shaking head – can drain and put sutures in
Example 2

- Chickens
- Meat birds have weakness in the cage, sitting on legs tucked under them, can’t stand much at all
- Notice this in many chickens
- Few birds have head tilted back and looking up
- Loss of body condition
Example 2

- Chickens

- Meat birds have weakness in the cage, sitting on legs tucked under them, can’t stand much at all
- Notice this in many chickens
- Few birds have head tilted back and looking up
- Noticed that this has been developing over time
- No diarrhea, no respiratory problems
Example 2

- Chickens

- Check feed – many animals are developing this
- Find that vitamins and minerals are not at the right level for these growing birds
- Diagnosis is mineral and vitamin deficiency leading to bone weakening and muscle weakening
Example 2

- Chickens

- Check feed – many animals are developing this
- Find that vitamins and minerals are not at the right level for these growing birds
- Diagnosis is mineral and vitamin deficiency leading to bone weakening and muscle weakening
- Change to feed made for growing birds
- Also check feed for others, laying hens, chicks – all need better feed than scratch chicken feed
Example 2

- Chickens
- Best types of chicken feed for your groups

<table>
<thead>
<tr>
<th>Feed Terms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layer Starter</td>
<td>Feed for baby chicks that will grow into layer chickens.</td>
</tr>
<tr>
<td>Broiler Starter</td>
<td>Feed for baby poultry that are grown for consumption.</td>
</tr>
<tr>
<td>Grower/Developer</td>
<td>Feed for older chicks but before adult feed.</td>
</tr>
<tr>
<td>Layer</td>
<td>Feed mixed precisely for layer chickens in production.</td>
</tr>
<tr>
<td>Broiler/Finisher</td>
<td>Feed mixed precisely to encourage growth of poultry consumed.</td>
</tr>
<tr>
<td>Scratch</td>
<td>Supplemental feed often used with layers during low egg production (winter).</td>
</tr>
</tbody>
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Example 2

- Chickens
  - Best types of chicken feed for your groups
  - Also – remember what the gizzard needs

| Grit          | Small pieces of insolvent stone eaten by chickens to grind their food. |
Example 3

- See chickens with watery feces and some have a little blood in the feces
- Ruffled feathers
- Retracted head and neck
- Weight loss
- Intestines full, red and white spots
Example 3

- Coccidia
- Most common cause of GI disease in chickens
- More severe form in younger chickens
Example 3

- **Prevention**
  - Sanitation – put water and feed at level of back – place so they can’t poop in water or feed
  - Management – protect cages from rain and provide ventilation

- **Treatment**
  - Amprol dissolved in water – see label for correct dose; treat for 12 days
Remember:

- Observe your animals often
- Watch behavior
- Check their body condition (small problems can cost you more long-term)
- Look to make sure they are healthy
- Watch them grow!
Thank you for having us – it has been wonderful to meet and learn about Pohnpei!