



LESSON NOTES

School: Ba Sangam College
Subject: Agricultural Science

Year/ Name: 12 _____
Worksheet: 22

Strand	AS 12.4 Livestock Production
Sub Strand	12.4.1 Apiculture
Content Learning Outcome	Research and elaborate on the history and importance of honey bees.

LESSON 1: SUMMARIZED NOTES ON BEES

Lesson Outcome: At the end of this lesson, the student will

- Discuss the overview, history, advantages and disadvantages, breeds, different castes, roles, requirements, bee hives, tools and equipment's, setup, hive care, diseases, pests, harvesting, products and by-products of apiculture.

Notes:

The inhabitants of each colony are divided into 3 castes; queen, worker and drone. Each hive member has its own role to play in the survival, growth and development of the colony. Of the many breeds of honey bees, four have been discussed for their temperament, resistance to pests and diseases and ability to produce large quantities of honey. Although apiculture is well suited to the Pacific, there are disadvantages associated with raising honey bees.

Honey has been valued by humans for thousands of years. The results of apiology has resulted in the development of apiaries and production of honey and the by-products of the colony of bees inhabiting a hive. Although apiculture is well suited to the Pacific, there are disadvantages associated with raising honey bees. Honey bees play a major role in biodiversity, sustainability and agricultural production. Honey bees need the following to survive: clean shallow water source; temperature of 33OC; gentle breezes and windbreaks in windy, cold areas; morning sunlight to allow them to navigate; security from predators and a constant food source. Honey bee colonies set up hives in the wild. Over time, people have provided various types of hives for the bees so that they can extract honey for their own use.

As apiculture has developed, materials, equipment, tools and husbandry practices have also developed, mainly to address challenges faced by apiculturists

Once a site for a hive has been set up, a colony must be secured and introduced to the hive.

Once set up, honey bees should be left alone. However, the hives must be inspected and cared for and the environment kept clean of weeds and pests.

Honey bee larva are susceptible to diseases caused by fungi, virus and bacteria

Pests are attracted to bees to eat honey, wax, pollen and bees or out of curiosity

Honey bees collect nectar from flowers; add proteins and enzymes; place it in the cells of combs then dehydrate it so it matures into honey.

Apiculture produces raw honey, beeswax, bee pollen, propolis, royal jelly, apitoxin and hive stock. It also provides pollination services for farms.

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Activity Worksheet 22

1. Refer to the textbook and fill in the table below:

(20 marks)

History	
Advantages and Disadvantages	
Breeds	
Different castes	
Roles	
Requirements	
Bee hives	
Tools and Equipment's	
Setup	
Hive care	
Diseases	
Pests	
Harvesting products and by-products	