Duck Farming Trainer Manual

A step-by-step manual for trainers to implement and manage a training course in Muskovi duck farming

by the Salvation Army
Agricultural Program

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Contents

1 Welcome

This step-by-step manual for trainers can help you to implement and manage a training course in Muskovi duck farming. You won't need to do a lot of additional background reading but if possible attend a training course put on by the Salvation Army Agricultural Program or any other organization that has been conducting training courses based on this manual.

We would like very much to hear about your experiences with using this training manual. We have therefore included an evaluation form and would be very grateful if you would complete it and return it to us at the address on the form. Your comments will help us to improve the next edition of the manual.

God bless!

2 Acknowledgements

The author would like to express his appreciation and thanks to all those who helped to make this training manual a reality. First I would like to thank the training course teachers (John Hagen, Janet Nehaya, Anis Libada, Sekom Kogedu and Moses Naewa) of the Salvation Army Agricultural Development Program for their input and the field-testing of the draft manual. They provided many insights, which helped to improve the training manual. I also thank livestock staff of the National Agricultural Research Institute of PNG (NARI) at Labu (Dr. Pika Kuhun, Andrew Thomas and Monika Mazi), consultants from the Australian Contribution to the National Agricultural Research System (ACNARS), an AusAID funded program (Rob Shelton, Dr. Alan Quartermain, Dr. Ian Grant, Dr. David Askin and Sue Philpott) for their assistance. The Salvation Army HIV/Aids team provided the lesson about HIV/Aids and Elisabeth Cox helped me with the lesson about gender awareness.

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Last, but certainly not least, we would like to thank PNG Incentive Fund for their financial support of the Agricultural Development Program of the Salvation Army since 2000.

PART I

Introduction to the Duck Trainer Manual Step-By-Step Guide

Purpose and Overview of the Training Manual

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How to make your training course successful for the farmers: Some important points

3 Introduction

3.1 Purpose and Overview of the Training Manual

Who is the manual for?

This manual is for agricultural extension workers and development workers who want to conduct training courses about Muskovi duck farming. The manual shows how to facilitate each lesson/activity but also provides background information about Muskovi duck farming in PNG and other third world countries. Once you have become familiar with the sequence of the lessons, you will depend less on the manual and develop lesson in a way that better suits the particular needs of you and your students.

Why use the manual?

How often have you heard agricultural extension workers say "those farmers are stupid because they did not do what I told them to do"? They tried, but because they did not involve the farmers fully in the process of adapting the new ideas to fit the farmers' particular needs the farmers did not understand the ideas and therefore did not use them. The training course outline in this manual aims to help you to enable farmers to work out what they want to do, how they should implement the lessons and techniques they learn and how to make sure they will continue to use them in the future.

If you take the time now to read the manual carefully and see how straight forward the approach is and follow the instructions it will save you a lot of time and failures in the future.

What does the manual try to achieve?

The Muskovi duck farming manual seeks to help the agricultural extension workers and development workers to:

- Make farmers successful in the management and breeding of Muskovi ducks
- Make sure that farmers get to know the important aspects of small scale Muskovi duck farming
- Encourage farmers to understand development issues such as making a successful business, food security, human nutrition, soil fertility, HIV/Aids and gender awareness.

It does this by:

- Providing a training course schedule, step-by-step lesson plans and background information about muskovi duck farming and other development issues.
- Empowering the farmers to set up and manage a small breeding centre for Muskovi ducks.
- Helping you, the trainer, to understand that before farmers will adopt and adapt a new idea and work hard at keeping it going, they need to understand it and see why it is important to them and their future.

How the manual is organized?

The manual has 21 theory and 2 practical lessons. The first 6 theory lessons and 2 practical lessons help you to take the farmers through the first part of the training course helping him/her to establish a small breeding centre for Muskovi ducks. Lessons 7 to 13 take the farmers through the second part of the training course showing him/her how to manage the animals. Lessons 14 to 17 involve other issues such as sustainable and integrated farming practices, HIV/Aids and gender awareness. Lessons 18 to 21 are designed for follow-up/monitoring training which is conducted about 9-12 months after the initial training course.

Each lesson contains suggestions for both teaching and farmer activities. Instruction on how to facilitate each lesson are provided under the following headings:

- Goal and purpose of the lesson or what the farmer will learn
- Time to allow for the lesson
- Materials needed
- How to do the lesson
- Background teaching notes
- Education tips
- Photos

Most lessons require the use of tools such as a black board, Muskovi ducks, hammers, saws, etc, as there is little classroom teaching involved.

3.2 How to use the training manual

The training course manual is an outline and guide to help you to conduct a village-based workshop in Muskovi duck farming. You will need to make adjustments to the training course details depending on what you have available for the courses. The Salvation Army agricultural development team had the luxury of being able to contribute food, tea and coffee for the course participants. Participants only had to pay for the livestock and our team offered the teaching for free.

We believe that the training course can also be done in a cheaper and simpler way. Food is not needed, as not many people eat lunch in rural area of PNG. If it is planned to provide food during the workshop the participants at their cost can organize this. Participants can pay the teachers/facilitators by giving them food, coffee for sales or in some other way. Each participant can be given responsibility to supply any materials needed such as nails, tools, tyre strips etc. The only real challenge is to find the livestock needed for the farmers and to transport them to the village. Chapter 9.1 gives a list of addresses were suitable livestock could be obtained in PNG at reasonable prices.

Prepare before you start

Before you begin working with a farmer group you must:

- Read through the entire manual carefully and make sure you understand the approach used and the purpose of each lesson.
- Breed a few Muskovi ducks yourself so that you have practical experience with looking after them and know what you are talking about.
- Gather all the materials needed for the activities such as those listed in chapter 10.2.
- If you hand out some Muskovi ducks to the farmers, make sure that the farmers contribute money to cover at least part of the cost of the ducks so that they will own the livestock they receive.
- Make sure the farmers are aware you are coming; inform them as early as possible.

Make your own toolkit

Chapter 10.1 provides guidelines to help you to prepare a set of your own tools that you will need to conduct the training course. Please remember these lists are provided as a guide only.

The toolkit must be adjusted depending on the building customs in the village (how to build duck housing) and the local vegetation and environment (availability of wood, building materials, etc.).

Select who and how many participants will be in the group

Generally, when using participatory and practical learning/teaching methods the group should have less than 20 participants. It is important that married participants are encouraged to take part as couples. In the PNG context women usually take care of the animals and therefore their participation in the training course is extremely important.

Experience taught us that we should work with farmers from only one village at a time. When only a couple of farmers from a village take part in a training course they tend to treat the information about Muskovi duck farming as secret and do not make it openly available to others in their village when they return home. Because of this unwillingness to share information jealousy may arise in the village and affect the farmer's efforts. If participants from 50% or more of the families living in a village take part in the training course the information will be hard to keep secret. There is also a high risk of stealing if only one or two farmers from a village are looking after ducks. Therefore we strongly recommend teaching farmers from only one village in each course so there are enough people in the village with the ducks and the skills to look after them.

Preparation visit

At least one preparation visit to the village must happen before the training course is conducted to make sure participants are aware of the commitment they must make. The following issues need to be addressed at the preparation meeting with the village/ participants:

- Contribution (Course fee)
- Place to hold the course
- Food for participants
- Accommodation for the course leaders
- Participants need to organize themselves to be ready for the training course. Some of the questions they need to answer before the course include:

➢ Who will take care of the participants' children?

➢ Who well get food from the gardens and prepare it for the participants?

- Where will the demonstration duck shelter and fence be built?
- Commitments that must be made by the participants before they take part in the course include an agreement to: -

➢ Attend, with spouse, for the full 3 days

➢ Provide food and firewood

➢ Provide material to build the demonstration duck shelter during the course

➢ Provide material to build a nest box and brooder by each participant

Should I follow the lessons in order?

The manual is divided into 21 lessons and each lesson is divided into teaching and activities. Be sure you follow the lessons in order since each lesson equips the farmers with what they need for the next lesson and to become successful duck farmers. You can, however, extend the training course and add additional lesson, if you wish.

How much time does the training course take?

The training course is designed in two parts. The first part takes about three days; the second part will take 2-3 days. However, if the farmers have little building material available to build the duck shed in the first part of the training course you will have to add one or two more days.

3.3 Some necessary background

Background

Motivated by the love of God the agricultural team of the Salvation Army is helping remote communities and farmers to improve their nutrition by helping them to produce more protein enriched food that they can eat. The team is mainly active in the Eastern Highlands Province of PNG.

Health surveys done by the Salvation Army Health staff revealed moderate to severe malnutrition among up to 67% of children below 5 years within the program areas. Therefore the agricultural team focuses on increasing the protein availability for the rural population in the targeted program areas.

Since 1998 the agricultural team has conducted over 30 one-week training courses mainly in rabbit farming, muskovi duck raising and free range chicken farming. Regular

follow up of the involved farmers with training days and extension visits contributes to the success of the program.

The Salvation Army Development Services also developed village based short courses on other themes such as Village Leadership Training, Primary Health and Sanitation Training, Toilet building, Sewing, Surveying for water supply, Village Birth Attendant, First Aid and Literacy. Hopefully, training course manuals covering the above subjects will be available in the future as well.

Issues that are important throughout the course

Gender, HIV/AIDS, environmental, spiritual and getting money are important issues for everyone.

Gender questions and environmental effects are a part of many of the lesson outlines and a special lesson on each topic is included towards the end of the training course.

Earning money is an issue in all villages. Except for some of the health and literacy related courses that the Salvation Army is conducting, all courses have the potential to earn money. All training courses are linked to Christian values and devotions are part of each training course.

We strongly encourage course leaders to transfer "awareness" and information about each of these important issues.

Spiritual Well-Being

Spiritual well being is important for the Salvation Army. Our approach is that life consists of body, soul and spirit. To develop our lives and our environment we need to address all three levels. We believe that people need the guidance and help of God to develop their lives, communities and environment in a way that God's creation is honored. We also believe that devotional times in the morning are essential to the well-being of the participants and the success of the training course. We encourage course leader to prepare devotional thoughts or to ask the pastors in the village or some participants to share a bible message with the participants each morning. Chapter 7 gives you some ideas about 6 devotional themes related to the course.

Teaching Notes

Teaching notes give you further background information about the content of the lesson. Under each teaching note there is some space where you can put your own comments, experiences and other ideas to help you with the lesson and its content.

Education Tips

All adults want to make sense of their world, find meaning and be effective at what they value and like doing. This is what makes them want to learn. The "education tips" are designed to be a practical, immediately usable resource for the course leaders. The education tips will help you to be more effective in your teaching so the participants will want to continue to learn. The "education tips" are strategies and examples that can be used to increase adults desire to learn. (Wlodkowski R.J., 1999). All the "education tips" included were practiced in our training courses and proved to be very helpful.

Overview of learning styles and training principles

Based on observations it seems that the majority of PNG nationals and Melanesians learn in a different way to most westerns. PNG nationals tend to learn by watching others doing something, e.g. dancing and then doing it themselves (active learning). Learning often involves a group and there are no formal lessons.

The way westerns learn is usually formal, is based on theory learned from books and includes reading, listening and writing. Most of the formal education carried out in PNG is done this western way and most of us are familiar with this system. Consequently, since this system was used to teach us, we tend to use the method we are used to when we teach. However, if we want to be more effective in our teaching it is important that we use a style that our trainees are used to. The teaching methods we use must therefore be similar to the teaching methods used in the village while they became adults. They are more likely to remember and use the lessons if they are taught in this way as it matches their cultural upbringing that is so important to them.

We have tried to use a PNG cultural teaching styles as much as possible in our manual. However, we are sure that some of the lessons can still be improved to match culturally adapted teaching methods. Here are some of the principles that guided us when we designed our training manual (Rempel Robin, SIL, 1990).

- Lectures and note taking (passive learning) should be a very small part of the lesson.
- Make your lessons as interesting as possible by using many pictures and examples, comparisons, word pictures and questions to keep the participants actively thinking and involved. It is best to have at least one example, story, drama, or picture to illustrate every point made in the presentation.
- Demonstrations, drama, drawing pictures, singing, discussions, games, question and answer, hands-on practice and other means of active participation should be a very important part of each lesson.
- Start each training workshop by showing what you hope the participants will achieve by the end of the course. (Use photos, demonstration product or make a visit to a farmer who has already implemented what the participants will learn)
- Use real materials (animals, plants, etc.) and situations whenever possible.
- Provide plenty of time for questions and clearing up ideas that participants are not clear about. If no questions come up from the participants after a lesson it often means that they are so confused they aren't sure what questions to ask. Asking them questions about the lesson will often give you an idea if they have understood and learnt what you have been trying to teach.
- Try to keep a relaxed, open and light (humorous) atmosphere throughout the training course. Make the training fun.
- Revision of each of the lessons and later follow up visits and training are key elements in successful training.
- It takes a lot more work to prepare an active learning teaching lesson than it does to prepare a passive learning lecture. Remember that. Prepare for it (Sanders, A. 1988).

3.4 Tips for a successful training course for the farmers

Some important points to remember are: -

- Be motivated by the love of God yourself and therefore be committed to the farmers and your work
- Live, eat, sleep and story with the farmers in the village during the course at least. The relationship you establish with the participants will have a large impact on how well they will accept new knowledge, skills, techniques and attitudes
- Use PNG village-adapted livestock and training methods
- Ask for commitments by the farmers before the course starts. (We ask each of the farmers to pay a course fee equivalent to the cost of the livestock we provide in the training course)
- Ensure regular follow-up training days and extension visits

PART II

The Training Course Step-By-Step

4 The Training course Step by Step

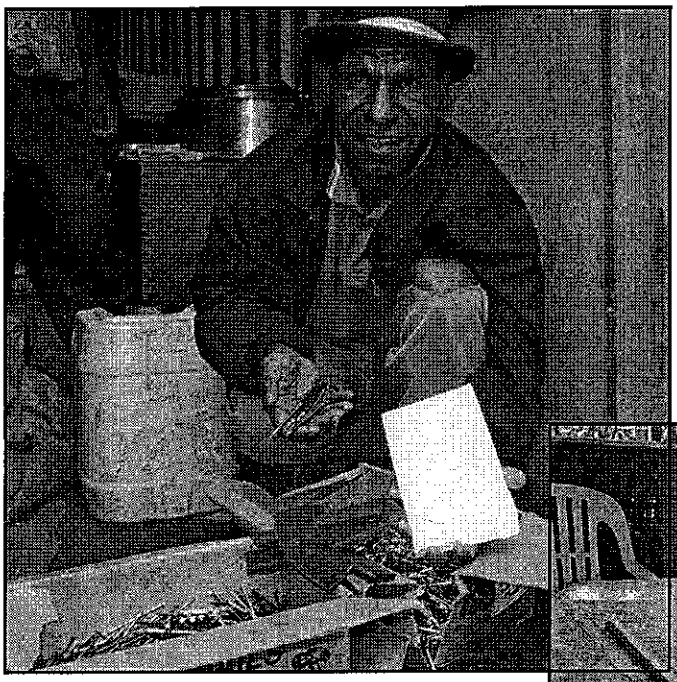
4.1 Training course Preparations

You or the participants must organize the following materials needed by the participants before you can start the first part of the training course:

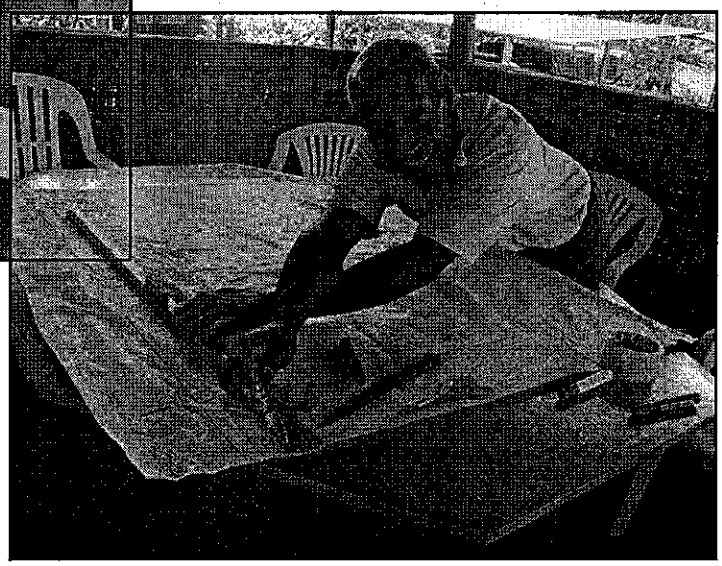
* Nails

* Hinges made from old tyres

Other materials mentioned as needed for lessons such as white or black board, name tags, duck booklets, markers, etc. are regarded as very helpful but they are not essential for a successful training course. All materials we found helpful are listed in each lesson and summarized in chapter 10.2.



Packing of training course material: Nails and old tyre band hinges



John is writing the training course schedule on an open stock feed bag

4.2 Training course Schedule

The training course is divided into two parts. Both the first and the second parts of the training course should take three days each. Make sure that the participants understand that the training course has two separate parts. It is a good idea to tell the participants what they will learn in both parts of the training right at the start. You will find the training course schedule for the second part of the training course in chapter 5.3.1 in this book.

Training course Schedule – First part

Time	First Day	Second Day	Third Day
8.00 – 8.30	Devotion	Devotion	Devotion
8.30 – 10.00	**Lesson 1** Welcome, roll call, introduction to the training course, breaking the ice, getting to know each other.	**Practical 1** Group builds an example of a duck house	**Practical 2** Each farmer builds his own duck nest box and brooder
10.00 – 10.30	Tea-break	Tea-break	Tea-break
10.30 – 12.00	**Lesson 2** Introduction to muskovi duck farming	**Practical 1** Building a duck house continued	**Practical 2** Building a duck nest box and brooder continued
12.00 – 13.00	Lunch	Lunch	Lunch
13.00 – 14.15	**Lesson 3** How to start a small business with ducks	**Practical 1** Finish building a duck house	**Practical 2** Finish duck nest box and brooder building
14.15 – 14.45	Break	Break	Break
14.45 – 16.00	**Lesson 4** How to build a duck shelter	**Lesson 5** Building a nest box and brooder	**Lesson 6** Revision and test

Teaching notes

Making a course schedule sheet

Get a new stock feed bag. Cut the bag open on the side and on the bottom so that it forms a large sheet.

Use a permanent marker and write the training course schedule on the cleanest side of the opened out bag. Now you can roll or fold the opened out bag with the training course schedule on it and you can use it for many more training courses in muskovi duck farming. Make it before the before the training course as part of your preparation.

What to do

1. Opening devotional

Training courses are opened and closed with a prayer and a short devotion. PNG people are well aware of the spiritual world and it is part of their belief system.

2. Roll call

Make sure that all the participants who where enrolled for the training are present. Use your list with the names of the participants to check them.

3. Introduction of yourself and teachers

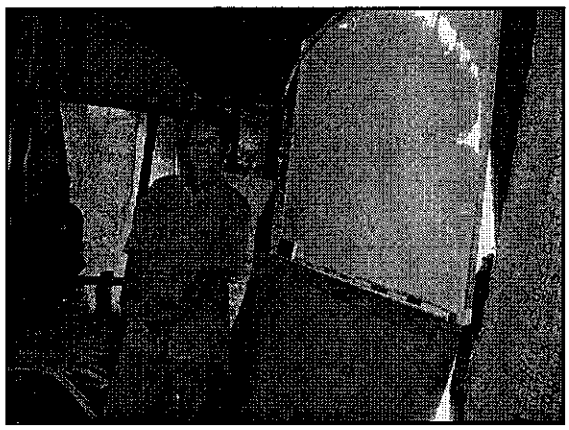
Make sure that you and other training course teachers are introduced properly. This is important for the participants to establish a feeling of trust and closeness. It is only when the participants trust you that they will accept new ideas that you are wanting to teach them. Tell the participants about

- Where you come from
- About your family
- About your work and experience
- About your own farm or animals
- About why you like conducting this training course for them

Each of the members of your team (course leaders) should do this.

4. Participant Introductions

Ask each of the participants to come to the front to introduce themselves, giving their name and saying a little about themselves. It is important that each participant speaks out in front of the group. This will give them the self-confidence to speak up later during the course and they will be less afraid to ask questions. It also helps to make the participants comfortable and happy to talk with you and the other teachers. It helps the participants to think of themselves as part of the team as they learn together.



Participant introducing himself in front of the group

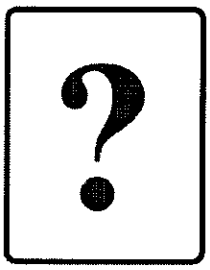
Give each of the participants an exercise book, a pen, a name tag and the booklet about Muskovi duck farming.

Write the following questions on the blackboard or whatever you have to write on and ask each participant to come to the front and answer them in front of the group:

- Where do you come from?
- Are you married and do you have kids? Tell the group a little about your family.
- What is your favorite food?
- What kind of animals do you look after now?
- Why are you interested in looking after ducks?

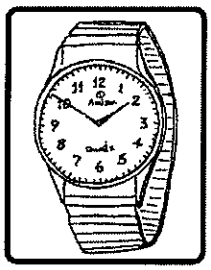
4.3 Training Course Lesson Plan - First Part

Lesson 1: Opening of the training course



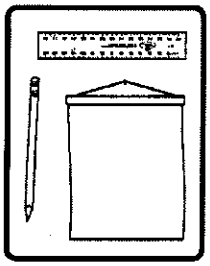
Goal and Purpose

- To get to know the participants, to introduce yourself to them and help them to relax
- To explain the aim and purpose of the training course
- To explain and clarify what the participants need to provide, what you expect them to do, what you will provide and what they can expect that you to do for them
- To give the participants an idea of what they will learn during the course



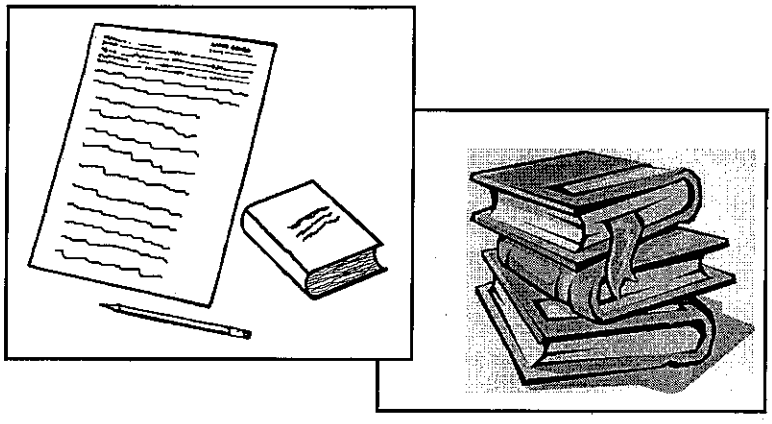
Time

- 1-2 hours



Materials

- List of participants names
- Name tags for participants and trainers
- Booklets about duck farming, exercise booklets and pens for the participants
- Roll of sticky tape
- Prepared training course schedule (see 4.2.1.2)



5. The training course goals

Write the training course goals on the white/black board or have them ready on a stock feed bag (see 4.2.1.2). Try to get the participants to tell you as many of them as they can, first, before you put your list up. The goals of the duck training course are learning the following:

- *How to build a duck house*
- *How to feed ducks*
- *How to breed ducks*
- *How to kill ducks and get them ready for eating*
- *How to build a nest box and brooder*

As well :

- *Each trainee will make his own duck house and fence using bush material*
- *Each trainee will make his own nest box and brooder*
- *Each trainee will make a drinker for his ducks*
- *Each trainee who passes the test at the end of the training course will be given a certificate and ducks*

6. The training course schedule

The training course schedule (see 3.....) prepared at home on the stock bag is shown and explained to the participants. ***Make sure that the participants understand that the training course has two parts****. In the first one they build a shelter, the nest and brooder boxes. Before the second one can take place each participant must have completed his or her own duck house with a fence around it, nest and brooder boxes. Once all the participants have finished this "home work", the ducks are given out (second part of the training course). How soon the second part takes place depends on how quickly the participants finish their "home work".*

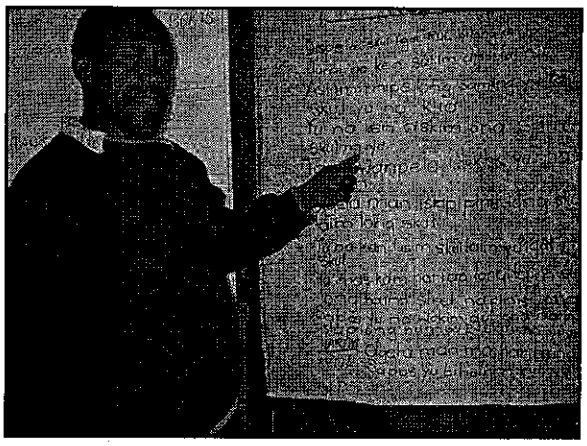
Training course schedule is explained to the participants

7. Training course rules

Having training course rules helps participants to know what is expected of them. Here are some rules we found helpful. You should write the rules on the white/black board or have them ready on a stock feed bag (see 4.2.1.2) and explain them carefully to the participants.

- **Husband and wife shall attend the course.** If a participant is married their husband or wife must attend the course also. Men are the ones who usually attend such training courses. Ask the following questions: Who looks after the kids? Who looks after the pigs? Who looks after the garden? Usually women! This is the reason that all married participants must bring their husband or wife with them as the women are the ones who are most likely to do most of the work of looking after the ducks. You should welcome women specially and praise them for attending the course.

- **All questions are allowed.** Any one can ask questions whenever they like: Make it a rule that all questions are allowed and that no question will be treated as bad or silly. Encourage participants to ask questions. Participants will learn more if they ask questions. After the training course is finished the teachers will leave and won't be there to answer any questions. Remember: You do not need to know everything!. If you do not know the answer, ask the participants to see if any of them know the answer or if they know anyone who might know. If you cannot find an answer ask the participants to wait until you come back and have found out about it.
- **Listen to each other**. Talking between the teachers and the participants is very important. However, talking between the participants is important too. The more we listen to each other the more we will learn from the training course. It is easy to learn if there is respect between the participants. This will mean that they feel happy, that they all listen carefully to each other and that no-one acts as though his is boss and knows everything.
- **Attendance is compulsory**. Make it a rule that attendance at all sessions is compulsory for all participants. It is only if the participants attend all the sessions that we can be sure that they will have all of the knowledge and skills at the end of the course so they can be successful duck farmers.
- **Do your "homework"**. Participants that do not meet the training course goals receive no livestock or certificate. It is extremely important that the participants have built a proper duck shelter with a fence, nesting box, brooder and drinker for themselves, as without this infrastructure/equipment in place, the participant cannot be a successful duck farmer. Therefore, if the participant has not done what we asked him to do we will not give him any livestock and he will not get a certificate at the end of the course.



Training course rules on a stock feed bag

Teaching notes

When you have finished showing the participants the content of the training course ask them the following question:

- Is there anything else you think you need to learn about Muskovi duck farming?

_____

_____

_____

_____

_____

_____

_____

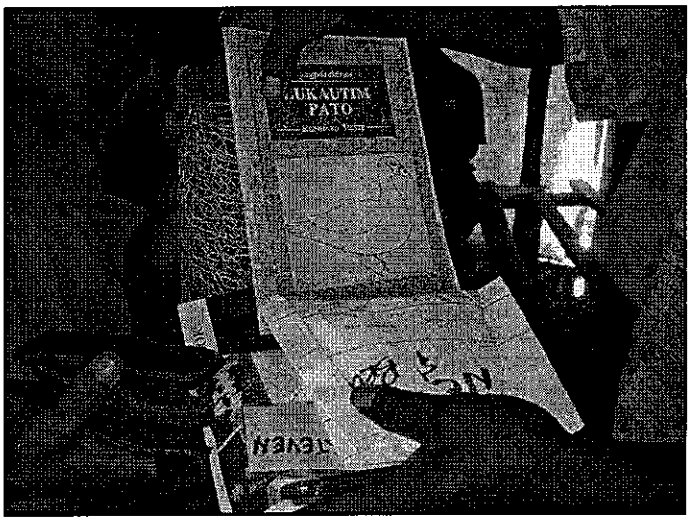
Education tip

Introducing yourself to the participants and sharing some of your experiences with them

Introduce yourself at your first meeting with a group and share a few things about yourself such as where you are from, something about your family, why you are conducting the course and then welcome them. This shouldn't take more than a couple of minutes. It is important to give the participants a chance to introduce themselves as well. This emphasizes your interest in them as people and helps them to see you as a person like them. It also helps to make them more comfortable so they are not so nervous about what may happen in the course.

As a course leader I often tell the participants the story of how I became involved with rearing ducks and how excited I was when we had the first ducklings in our backyard. I still remember when our first duckling hatched and how excited my whole family was. We put the little fellow in a small box, put lots of cloth into it and put a lamp right above its head.

Introducing themselves is a common courtesy that many course leaders forget to do.



Name tags, booklets about duck farming, exercise books and pens that we give to participants at the start of the training course

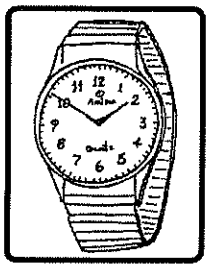
Lesson 2: Introduction to duck farming

Goal and Purpose

To learn what kinds of ducks are available in PNG.

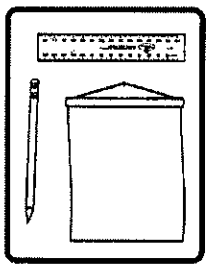
To learn where ducks can be raised.

To learn why Muskovi ducks are suitable for PNG villages.



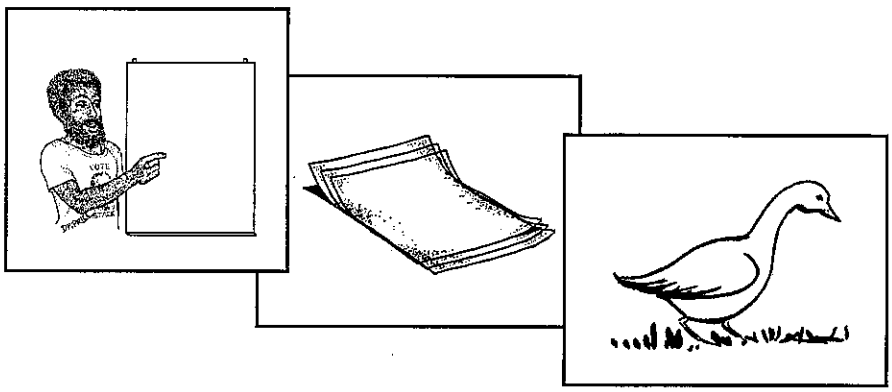
Time

- 1 hour



Materials

- Black board or white board
- Butcher paper
- Chalk or white board markers, markers
- If available, take a true duck (Khaki Campbell, White Campbell or Rouen) and a Muskovi duck with you into the village. Show them the differences between true ducks and Muskovi ducks.



What to do

1. What kinds of ducks are found in PNG?

Give the participant an overview of the kinds of ducks available in PNG. If possible take some different kinds of ducks to the course site and show them the difference between true ducks (Khaki Campbell or Rouen) and Muskovi ducks. Below is a table summarizing the differences:

True Ducks	Good points	Poor points	Photo
Khaki Campbell and White Campbell	Good egg production 200 – 250 eggs per year	• Only mate well when in water (they need a pond for this purpose) • Need to be fed stock feed to do well	pic 7.1
Rouen	Good egg production 200 – 250 eggs per year	• Only mate well when in water (they need a pond for this purpose) • Need to be fed stock feed to do well	pic 7.2
Other ducks			
Muskovi duck	• Ideal for PNG village conditions • Are strong and do not get sick easily • Good brooders • Good at collecting their own food	• Produce only about 90 eggs per year • Need stock feed only when small	pic 7.3

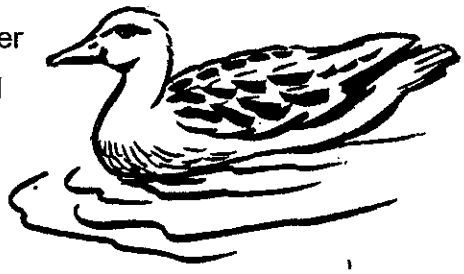
Table 1: Different types of ducks found in PNG

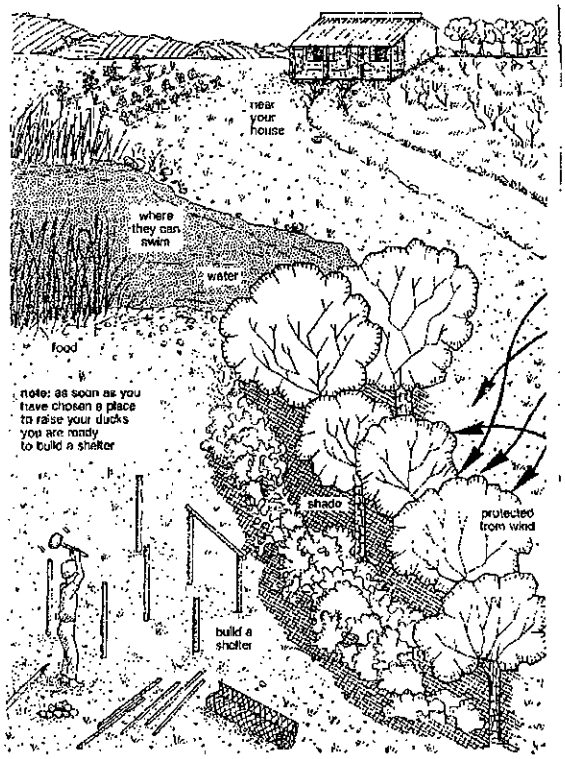
2. What is a good place to raise ducks?

Split the participants into two groups. Ask each group to discuss the following question: What are the things that a place needs before it is good to raise ducks there? They should write a list of "all the things that a place needs before it is good to raise ducks" on a sheet of butchers paper or on a black board. Give them about 10 minutes to do this activity.

Then each group presents their list. Discuss their lists and see if they have mentioned all the points listed below?

- Needs to be close to the village (house) so you can look after the ducks easily
- Needs good shade (if ducks stay a long time in the sun, they may get sick)
- Needs fresh green grass for the ducks to eat and where they can find insects
- Needs to be away from pigs (pigs often kill and eat ducks)
- Needs to be a place where eagles do not fly very often
- Needs to be near a creek or where there is plenty of water
- Needs to be a place that is not too dry, sunny or covered with kunai grass





Example of a good duck shelter with water, shade and fence which is near the house

3. Why are Muskovi ducks suitable for PNG villages?

Ask the participants the following question: Why do you think ducks are suitable for PNG villages? Write their answers on the white board and discuss them. See if they have mentioned all the points listed below?

Muskovi ducks are suitable for the village because:

- They can look after themselves very well and do not need a lot of care
- They are excellent at hatching ducklings
- They are good at finding their own food
- They can live and breed when they are only getting village food
- They can mate on the ground and do not need water for mating

Teaching notes

It is important that you talk freely with the participants about duck farming. See education tip.

Have some ducks with you, put them on the table and let the participants look closely at them and touch them. It is easier for people to talk about an animal if they can see it, feel it and touch it.

Education tip

Respect

For learning to take place there must be respect between the teacher and the participants. People are not only willing but also ready and eager to learn when they feel respected. What creates this feeling of respect?

First: **Trust between the participants and teacher.** The participants need to trust that they will get what they need from the course and that the teacher is a good teacher and knows what he is talking about. This makes the participants feel happy and comfortable. It is therefore important for you, the teacher, to show by your actions and words that you know what you are talking about and are a good teacher. You can show this by using good written materials (hand out booklets on Muskovi duck farming) and by the words you use and how you say them in your introduction.

Second: **Make sure the participants know the goals of the course.** It is important for the participants to know what is expected of them and what they can expect of you and the training course. If you ask them what they would like to get from the course and if there is something they would like to add to the course it will show them that suggestions they make will be listened to and that it is possible to change the course goals and objectives.

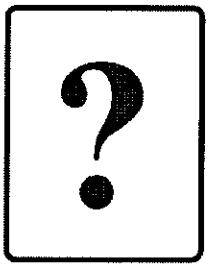
Third: **Begin with simple, clear and easy tasks or activities before talking about harder and more complicated issues.**

Forth: **Acknowledge every contribution from the participants especially at the beginning of the course.** For example say thank you for questions or contributions from participants before you give the feedback.

Fifth: **Have group rules and participation guidelines that tell participants how they should behave.** All groups have rules about the way its members should behave. By saying these rules and talking about them with the participants at the beginning of the course you will help to make sure that people know what is expected of them and you will build an atmosphere of respect.

Duck shelter with shade and water nearby

Lesson 3: Can a Muskovi duck rearing business be successful?



Goal and Purpose

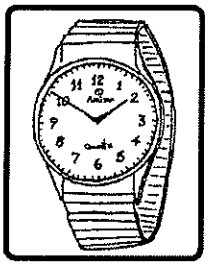
To learn what looking after Muskovi ducks will give you

To learn what needs to be done for a duck farmer to be successful

To learn how many Muskovi ducks a farmer can look after

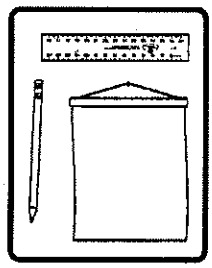
To decide who will do the work needed to rear Muskovi ducks successfully

To understand the problems that you will face in your duck farming business



Time

- 1 hour



Materials

- Black or white board
- Chalk or white board marker
- A Muskovi duck

What to do?

1. What kind of benefits do you get from farming Muskovi ducks?

Split the participants into two groups. Ask each group to discuss the following question: What kind of benefits can you get from farming Muskovi ducks? They should write a list of all the benefits they expect to get on a sheet of butchers paper or on a black board. Give them about 10 –15 minutes to do this activity.

*Then each group presents their list. The instructor draws a line down the center of the white board or a black board to divide it into two halves and writes **Benefits** on one side and **Work that must be done** on the other. Write the answers from the group on the **Benefits** side and discuss the answers. See if they have mentioned all the points listed below?*

Benefits	Work that must be done
• Ducks lay eggs and the duck and the egg can be eaten. • They are good to eat. • They will help to feed your family and keep them strong and healthy • They are easy to raise are good brooders and need less care than chicken. • They are strong birds and do not get sick easily. • They can be sold for a good price • They are bigger than chickens. Male ducks can be up to 4.5 kg in weight while female ducks can be up to 2.5 kg in weight • They produce manure for your garden	

Table 2: Benefits of duck farming

2. What work must a duck farmer do?

Ask the participants to go back into the same two groups. Ask each group to discuss the following question: What kind of work must be done to be a good Muskovi duck farmer? They should write a list of all the work they need to do on a piece of butchers paper under a heading "Work that must be done". Give them about 10 –15 minutes to do this activity.

Ask each group to talk about their list. Write the answers from the participants in the "Work that must be done" column and discuss the answers. See if they have mentioned all points listed below?

Benefits	Work that must be done
	• Ducks need feeding twice a day. Ducks are always hungry like pigs. *Are you ready to cook food for your ducks twice a day?* • They must have plenty of water at all times. *If ducks don't have water with their food they may get sick.* • You must have a wantok who will look after your ducks when you go away. • You must have a good duck shelter and a strong fence. • You must clean out the duck shelter and the brooder as soon as they are dirty • You must learn how to look after Muskovi ducks by: o Reading about duck farming, o Talking to other people with experience in duck farming o Carefully watching your animals o Working together with other duck farmers

Table 3: Work that a duck farmer must do

3. How many Muskovi ducks should you keep?

Ask at least 5 participants the following question: How many Muskovi ducks would you like to keep?

Most of the participants will give you a high number (5 or more). These participants would like to be "bigmen", would like to be famous and would like to have a big business. That is fine, but there are problems and they need to be careful. Rearing a lot of ducks in the village setting would mean lots of work each day.

Tell the participants that it is best if they start with only a few ducks so they can learn all of the things that need to be done for them. If they are successful in rearing a small number then they can increase the number up to 10 ducks or more. To look after more than 10 ducks is difficult if you do not have access to proper stock feed.

4. Who must do the different jobs to raise the ducks

Draw the following table on the white board. Ask the participants; Who will do which kind of work involved in duck farming?

Put an X in to the different boxes

Work	Husband	Wife	Children	Others
Building and maintaining a good duck shelter and a strong fence	X			
Cooking food for the ducks				
Feeding the ducks twice a day				
Giving the ducks enough water every day				
Cleaning out the duck shelter and the brooder as soon as they are dirty				
Letting the big ducks out of the shelter in the morning and shutting them in the evening				
Checking on the eggs				
Watching the ducks to see if they are OK				

When the table is filled in, discuss the results with the participants.

Make sure that the participants understand that looking after Muskovi ducks is a family business and everyone in the family needs to help with the work if the business is to be successful.

5. What are the biggest problems you will face in your duck business?

Discuss the biggest problems you are likely to face in duck farming with the participants. These problems will include: -

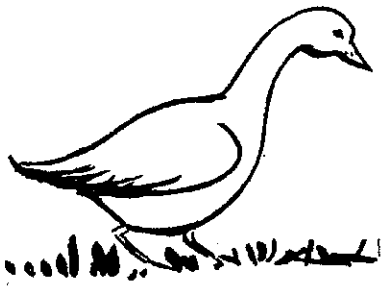
Stealing – What can be done to prevent stealing?

Stealing is a big problem in many villages. Young people who smoke Marihuana are very hungry and may steal the ducks to eat them. Ask the participants the following questions:

How can they prevent stealing in the village? Discuss their ideas.

Make sure that the ideas suggested do not include shutting the big ducks in all day as they will not be able to find food for themselves. If they lock them in the shelter/fenced area, the ducks

will not do well. Muskovi ducks are like pigs, they need to be able to move around a lot to find the food they need to grow and breed well.



Ask the participants to raise this problem in a village/community meeting so that everyone in the village is aware of the problem and can help in finding a solution.

Poor feeding – What can be done to feed ducklings properly?

Young ducklings need to be fed properly with sweet potato or corn, greens and some protein such as beans. Feed them with some stock feed if possible. If they are not fed properly the Muskovi duck will not grow well and the weight of the female duck is likely to be below 2kg (male duck below 3kg). If the female ducks are too small they will either not lay any eggs or the eggs will be small and ducklings will not hatch from these eggs.

Grown up ducks eat just about everything. It is not hard for them to find enough food for themselves as long as they are let out of the fenced area for as long as possible each day so they can roam around. Just lock them in at night!

Wet and cold Ducklings – How can you protect ducklings from getting wet and cold?

Many people think that ducklings need water to swim. This is wrong. Make sure that your ducklings do not get wet from rain, or from a leaking or bad drinker. If you live in a place that is a bit cold any wet ducklings will get cold and die.

Natural enemies - How can you protect ducklings from their natural enemies?

Ducklings have many enemies. You must protect them from:

Dogs, cats, rats, snakes, tarangau, and big male Muskovi ducks (drakes) which will sometimes kill young ducklings

Teaching notes

It is important that the course leader talks with the group and does not simply lecture to them.

This is the time when the course leader talks about the advantages and the difficulties of duck farming. Participants need to understand that to look after animals is hard work and requires work by the whole family.

We put this lesson right at the beginning of the training course because we believe that the participants at a Muskovi duck workshop want to keep ducks for a purpose. We believe their main purpose is to make a small business to use the ducks to fulfill social obligations and to improve their living standard. They expect to get some sort of profit from the business in the end.

Education tip

Showing respect for what participants know

Adults are not like children. They already know many things, have had many experiences, and know what they want to learn more about. You must find out what they know by asking questions, listening to their answers and respecting their knowledge.

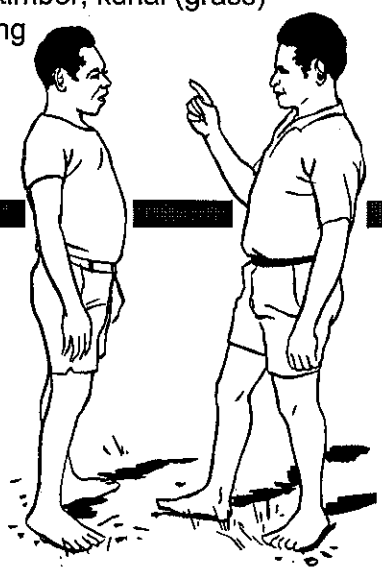
It is important to give participants the chance to say what they know and what extra knowledge they need. For example, the course content/schedule can be shown to learners with the question: "What else do you feel you need to learn about Muskovi duck farming?" This approach respects the participant and invites him to analyze, make suggestions, add some other the topics or even say, "I know about that already and it could be left out".

In Lesson 3 we suggest asking the participants about the benefits of duck farming and what work needs to be done for it to be successful. We believe that the participants already know most of the points listed in table 2 so ask them and use their answers to fill in the table. If they do not include any of the points you have on your list you can ask them if they think these other points are important, and if they agree, add them to the table. This is how they learn new things.

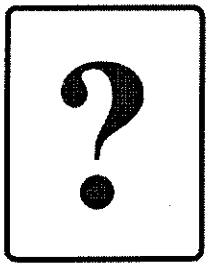
Most of the lessons in this manual for trainers use the idea of asking the participants what they already know and then giving them any extra information they need as well. We have had many lessons in which participants become very excited about what they are learning using this process.

A practical guide is: "Don't ever do what the learner can do, let them do it and show you; don't ever tell the learner what they already know, let them tell you."

Lesson 3 is usually the end of the first training day. If you have not done it yet you will need to advice the participants to bring timber, kunai (grass) and other building material for the second training day to construct the duck shelter and the fence.



Lesson 4: How to build a duck shelter



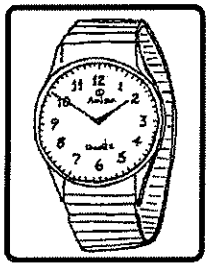
Goal and Purpose

To learn why ducks need a shelter

To learn what kind of shelter ducks need

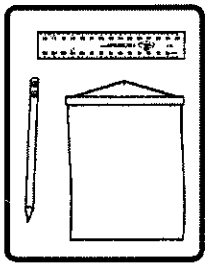
To learn what the natural enemies of the ducks are

To build an example of a fenced duck shelter with the help of all the participants.



Time

60 minutes teaching & 1 day of practical



Materials

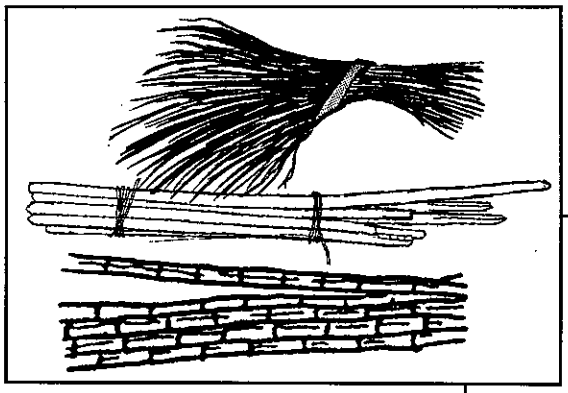
Timber

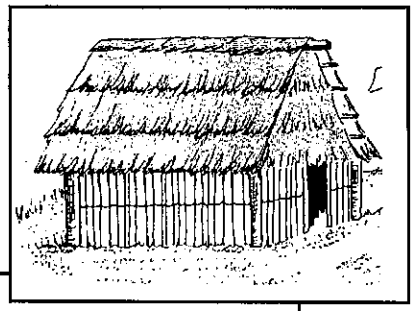
Grass, Kunai

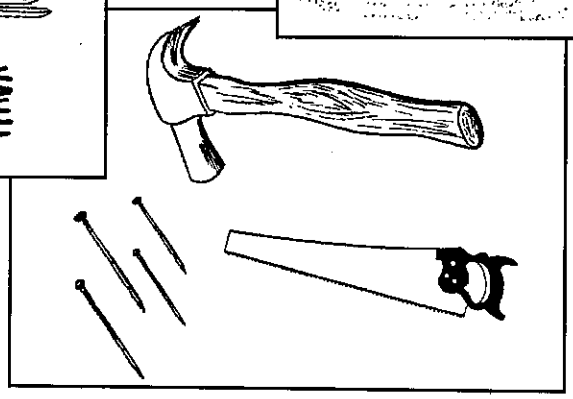
Bamboo

Pitpit

Nails







What to do

1. Why do ducks need a shelter

Split the participants into two groups. Ask each group to discuss the following question: Why do the Muskovi ducks need a shelter? They should write a list of reasons "Why do the Muskovi ducks need a shelter" on a sheet of butchers paper or on a black board. Give them about 10-15 minutes to do this activity.

Then each group presents their list. Discuss their lists and see if they have mentioned all the points listed below?

- To keep them safe from enemies when they are sleeping at night
- To protect them from disturbances when they are sitting on the eggs
- To protect the ducks from thieves
- To protect the young ducklings from getting lost
- To protect them from cold, wet or dirty ground which may make them sick. Because ducks sleep on the ground the house provides a dry sleeping place for them.
- To protect them from too much sun. (Strong sunlight is bad for ducks)
- To provide a place where you can collect their eggs as they usually lay them at night. You can collect them in the morning.

2. What are the duck's enemies?

Young ducks, especially, have many enemies. You must protect them carefully.

Ask the participants the following questions: What are the duck's enemies? Write the answers from the participants on the white board and discuss the answers. See if they have mentioned all the points listed below?

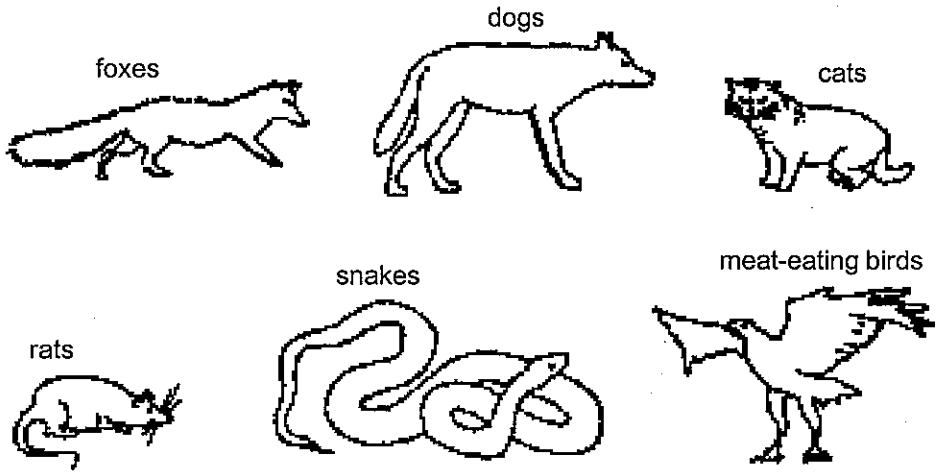
Dogs, cats,

Rats, snakes

Tarangau

Thieves

Big male Muskovi ducks (Drakes) sometimes kill young ducklings



Enemies of ducks

3. What kind of shelter do ducks need?

Before the participants can build a duck shelter they must ask themselves: How many Muskovi ducks should I raise?

Ask the participants: How many Muskovi ducks would you like to keep?

The duck shelter we suggest in this training manual is big enough for 12 large Muskovi ducks.

We suggest the each participant starts with a flock of 3 ducks (1 male and 2 female ducks). If he looks after his initial breeding stock well he can increase his flock to 6 ducks (1 male and 5 female ducks) A flock of 6 ducks will lay 4-7 eggs each week.

Remember: Look at the lesson on where ducks can be raised. (4.3.2.4.3)

4. Building a duck shelter

Before you go to the site where the shelter is to be built, tell the participants about the size of the duck shelter and the materials they will need. If you do this lesson at the end of day 1, you can ask the participants to bring the material needed to build the shelter and fence with them the next day.

Information about a duck shelter

Size: 3 ducks need 1 square meter (1 meter by 1 meter) of space. Therefore, we suggest you build a shelter 4 square meters in size (2 meters by 2 meters) which is enough for 12 ducks.

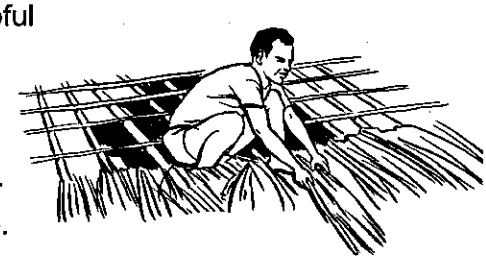
Materials and parts.

Roof: In the highlands, participants will use grass (kunai) to cover the roof

Window: An opening to allow some light and air is helpful

Doors: Doors are usually made out of timber. We supply the participants with a couple rubber strips cut from old tyres for door hinges

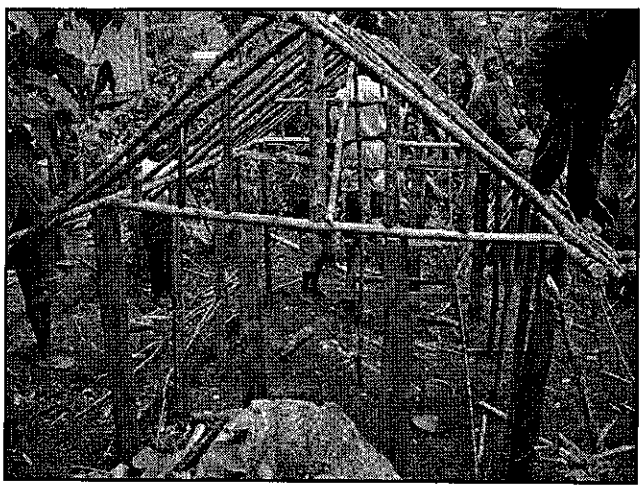
Fence: In the Highlands, the participants use pitpit or small sticks from young trees to build a fence.



Litter: Put dry grass or coffee husks as a litter on the floor of the shelter.

Building a duck shelter

The participants choose one of the participants from their group. The chosen participant should show where he/she wants the duck shelter to be built. At this place the entire group under the instruction of the course leaders will start to build a duck shelter with a fence.

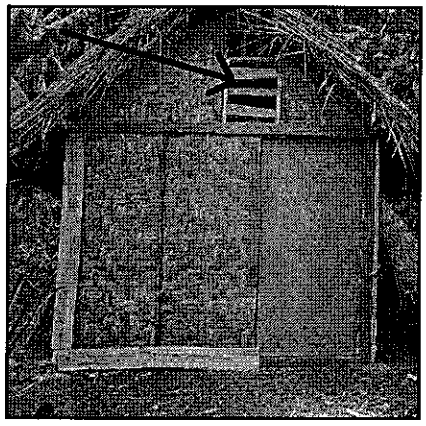


Ask the participants: Is this a good place to build a duck shelter with a fence? Discuss the good and bad points about the place chosen using the points raised in the lesson on "What is a good place to raise ducks? *(4.3.2.4.3)*"

- Using the materials brought by the participants make a shelter frame.

Duck shelter frame

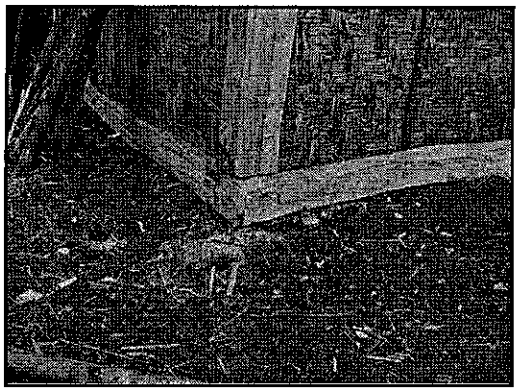
- Make the walls out of bamboo or pitpit. Cut a window in the wall so that the ducks have light and fresh air.



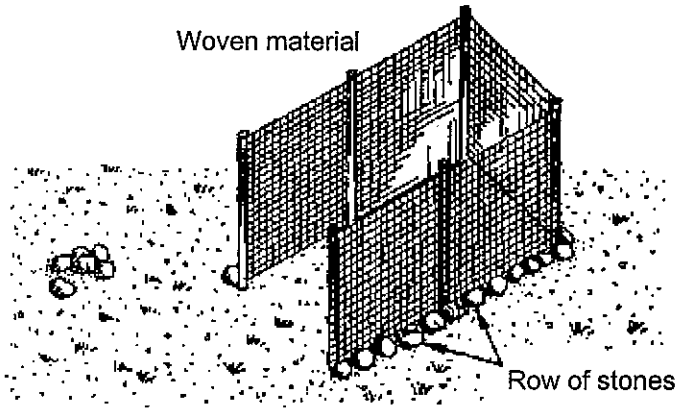
Bamboo wall with window

- To keep animals from digging under the walls of the shelter:
  1. Bury the bottom of the wall in the ground so that dogs and other enemies cannot dig under it.
  2. Put a row of stones around the bottom of the wall on the outside to make it stronger.

- Use kunai to make a good roof. Make sure that rain running from the roof does not fall into the fenced area, as it will soon get very muddy for the ducks. Make good drainage for the run-off water from the roof.



Bottom of wall buried and strengthened with timber to protect from dogs or other natural enemies



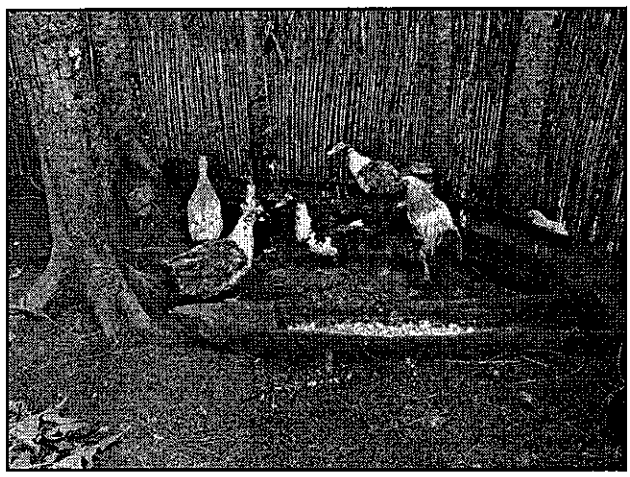
Or the bottom of wall buried and protected with a ring of stones

- Build a door and use rubber strips cut from old tyres as hinges.

Photo 20: Duck shelter roof

Photo 21: Door with tyre hinges

- You can put some dry coffee husks or dry grass on the floor of the shelter so that all the ducks can sleep in a dry place. The ducks do not like it when their sleeping place is wet. The litter must to be taken out as soon as it gets too dirty or wet. The wet or dirty coffee husk or grass make a good manure for your garden.
- Make a high fence of woven bamboo, pitpit, palm leaves or other materials. Never try to put too many ducks in a fenced shelter. If the place is too crowded, it will quickly become wet and dirty and your ducks may get sick. Ducks can be quite messy birds.
- You can also use chicken wire for the fence. However, wire costs a lot of money.
- You must build another shelter or run for all the young ducks when they leave the mother duck as they do not do well if kept in the same place as the adult ducks. If you do not want to build another shelter you must sell or eat them.



Fence around the duck house. Give enough space for the ducks so it does not get too muddy

Teaching notes

1. Practical

The participants will build a duck shelter with a fence. This usually takes a full day for the group to finish. Late in the afternoon of the second day of the training course we usually start to show how to build a nest box and a brooder. Again participants need to be reminded to take the needed building material to the following training day to be able to construct their nest box and brooder.

2. Home work

Each participant has to build his or her own shelter and fence after the first part of the training course. They must finish this work if they want to come to the second part of the training course.

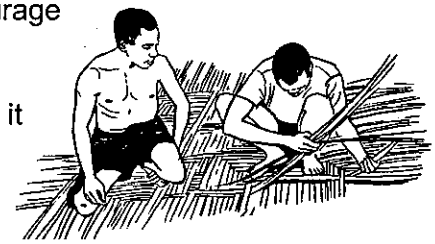
Education tip

Doing and thinking

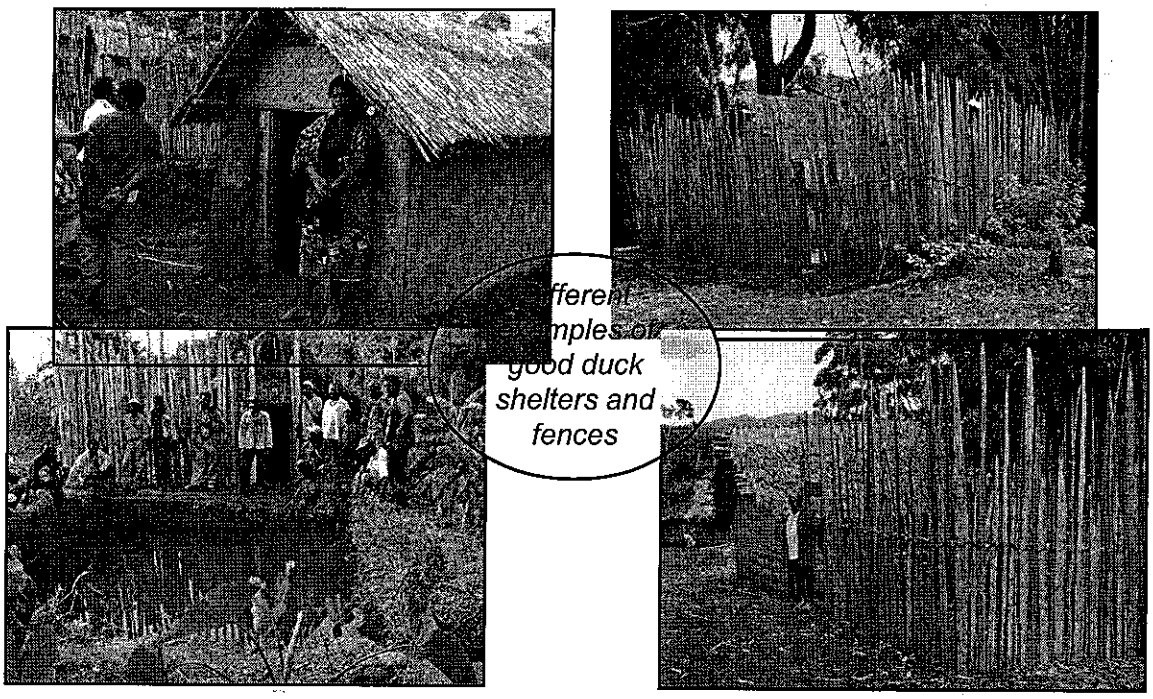
Teachers know that adults learn most by doing things themselves rather than only by being told how to do things. After they have done something, then is the time for them to think about what they have done and to see if there are other ways they could try to improve what they have done. In many third world countries and especially in PNG most people learn by copying and doing.

Classroom teaching where a teacher stands in front of the class and only talks or where the class is asked to read about things in books, is a western idea of learning. If you use this method of teaching in a rural area in PNG, people find it hard to understand what you are trying to teach them also find it hard to actually do what you have told them, afterwards.

Therefore our training course always has lots of practical parts in it where people learn by doing. If you can think of even more practical lessons to include in the course we would like to encourage you. It must be a process: first, doing – then thinking about what you have done – then seeing if there may be a better way of doing it – working out the best way and then actually doing the task in the new way.

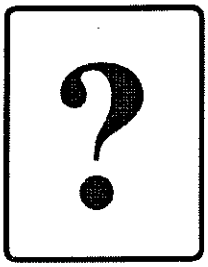


It is good to show the participants some pictures of different kinds of duck shelters (see below). They may try some of the other ways and will see that there is more than one way to build the shelter. We found most participants put a lot of effort into their work and were very proud of the shelter they had built.



Different examples of good duck shelters and fences

Lesson 5: Building a nest box and a brooder



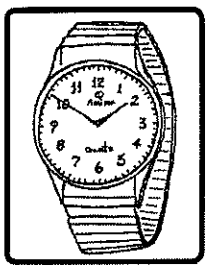
Goal and Purpose

To learn why ducks need a nest box

To learn how to build a nest box

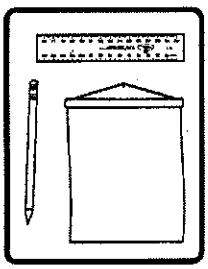
To learn why ducks need a brooder

To learn how to build a brooder



Time

30 minutes & ½ day of practical



Materials

Example of a nest box already built

Timber

Bamboo

Nails

What to do

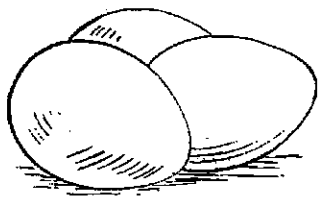
1. Why do ducks need a nest box?

Ask the participants the following question: Why do you think ducks need a nest box? Write the answers from the participants on the white board and discuss the answers. See if they have mentioned all the points listed below?

- Mother ducks are less likely to break their eggs
- Ducks prefer a dark, quiet, protected place to lay their eggs and a nest box provides these conditions.

2. How many nest boxes do you need?

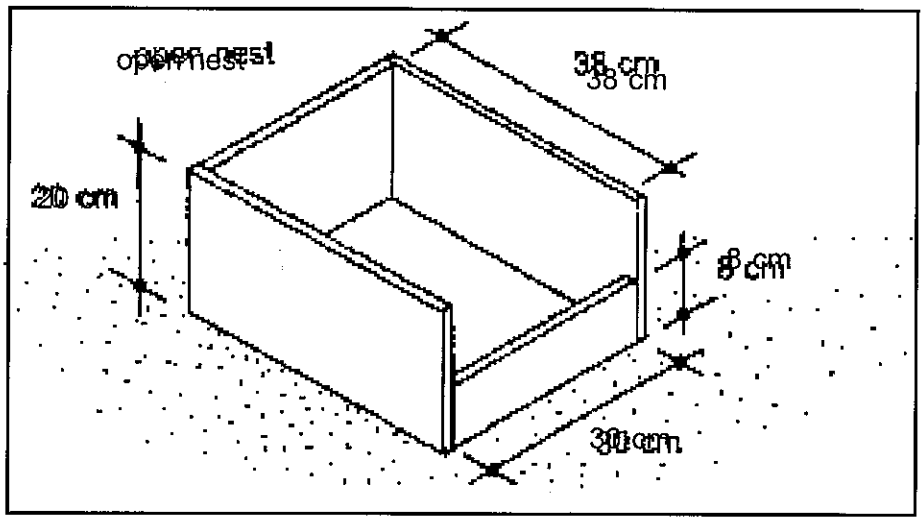
Each breeding female needs her own nest box. If two ducks have to share a nest box, many eggs will be broken as they will start to fight over the nest box, the eggs and the ducklings that hatch out.

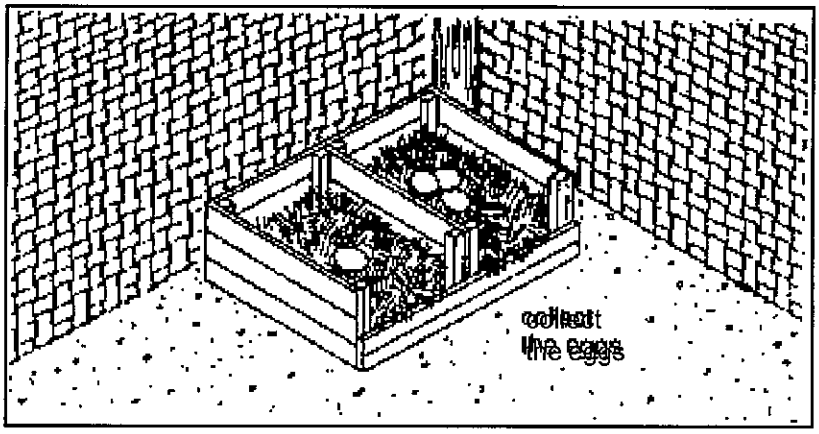


3. How to build a nest box?

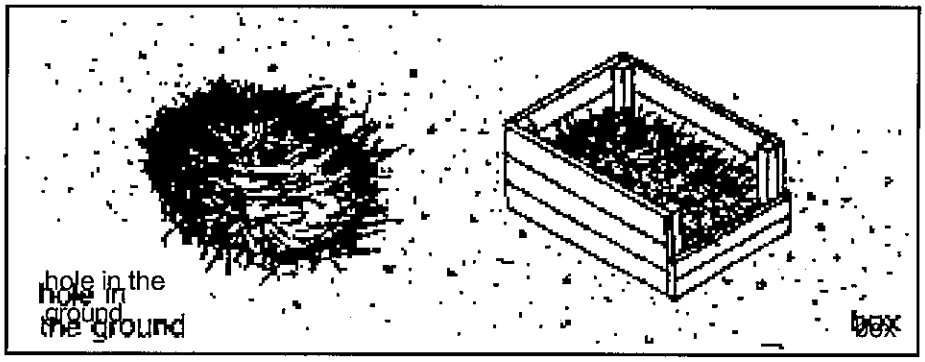
There are many different types of nest boxes. Some are just a hole into the ground but a good nest box is about 30 cm wide, 38 cm long and, if it has a roof, from 30 to 35 cm high.

If nest boxes are built too large then two ducks can fit in easily and you will get broken eggs and fighting. If a nest box is built too small then the ducks may not use it as there is not enough room for them to be comfortable in it.





Drawing and model of a nest box



4. Why do ducks need a brooder?

Ask the participants the following questions: Why do you think ducklings need a brooder? Write the answers from the participants on the white board and discuss the answers. See if they have mentioned all the points listed below?

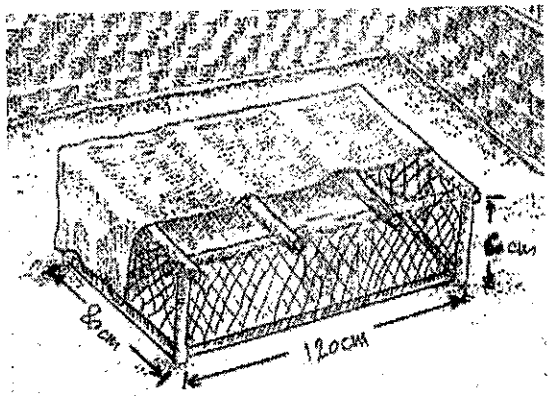
- To protect the young ducklings from enemies such as other ducks and especially the drake, tarangau, pigs, dogs, snakes)
- To keep them warm
- As a place where they can be fed special food, such as stock feed, without adult ducks stealing it.

5. How to build a brooder?

The best place to put your brooder would be in the house near the fireplace. It is usually a warm place and as you cook, food and water is near the young ducklings and their mother.

We suggest that participants build a fenced box. Size: 80 cm by 120 cm and 60 cm high. Use bamboo or chicken wire to make the fence around the box.

In the highlands put some timber across the top so that you can cover the box with a sheet of cloth at night, when it is cold.



Drawing of a brooder

Teaching Notes

1. Background

Small ducklings need special care. It is best to raise the ducklings away from the rest of the flock as quite often drakes and other ducks will peck at and may kill young ducklings as they come out of the nest. The ducklings also need a warm place and some special high protein food, such as stock feed, for at least 2-3 weeks.

2. Practical

Each participant must build a nest box and brooder. This usually takes almost a full day for the group to finish. It the participants have all the building materials ready it will take less time. When they have finished we usually ask the participants to display their nest boxes and brooder so we can see which nest box and brooder is the best. The winner is given a small prize.

We usually continue by going over the main points we have covered in the day and a give a test if the next boxes and brooders are finished in time.

3. Home work

If the participants did not finish building the nest box or the brooder they are asked to finish them after the first part of the training course. Before participants can take part in the second section of the course they must have finished making a nest box and brooder.

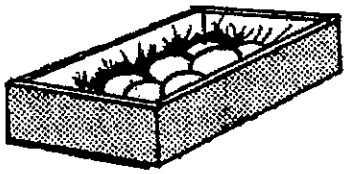
Education tip

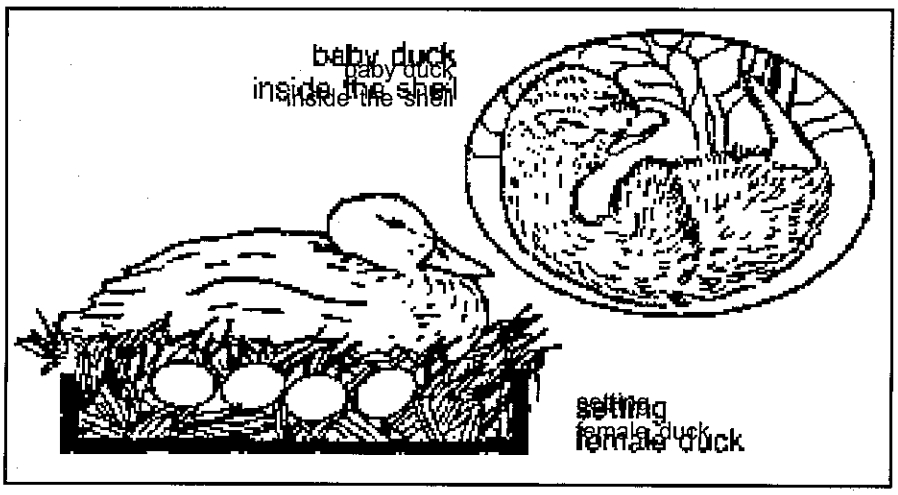
Provide Positive Feedback

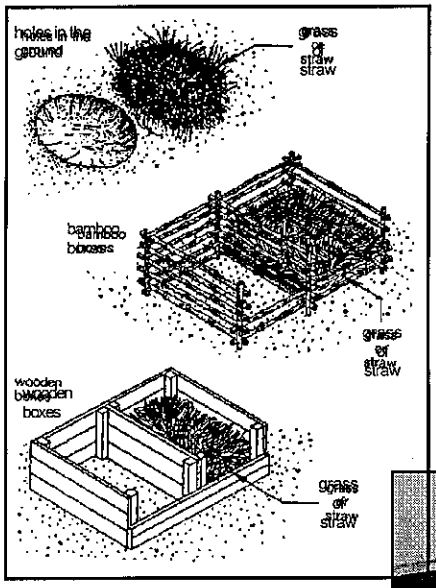
Feedback is information that the participants are given about the quality of their work. Positive feedback is probably the most powerful tool that a course leader and other learners can use to make the participants excited about doing the work. Effective feedback must be:

- **Specific**: Your feedback could be "your brooder or nest box is exactly the right size".
- **Constructive**: Your feedback could be "your nest box is made out of bush material only. This is excellent as it will save you costs for nails or timber that you would need to purchase otherwise".
- **Prompt**: In general it is best to give feedback straight away as the situation demands it.
- **Positive**: Positive feedback highlights the improvement and progress rather than focusing on the mistakes

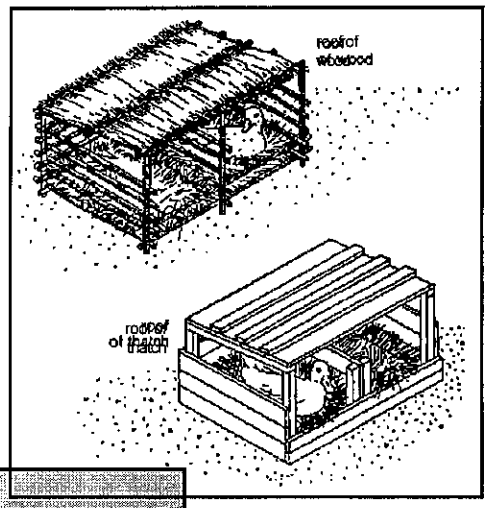
We usually make a display of the nest boxes and brooders build by the participants. We then ask an outsider to decide which is the best nest box and brooder and give the makers of these a small prize. We discuss the nest boxes and brooders with all the participants and give positive feedback to them about the quality of their work and the effort they have put into building them.

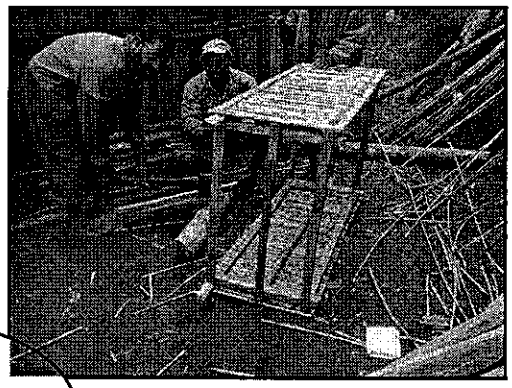




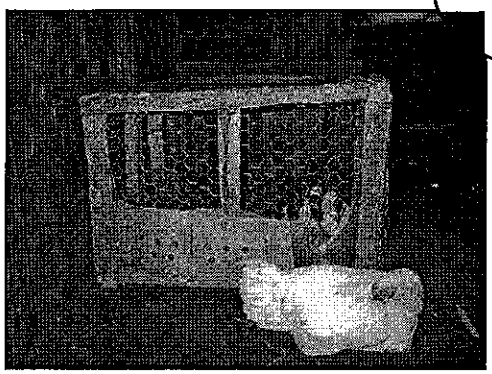


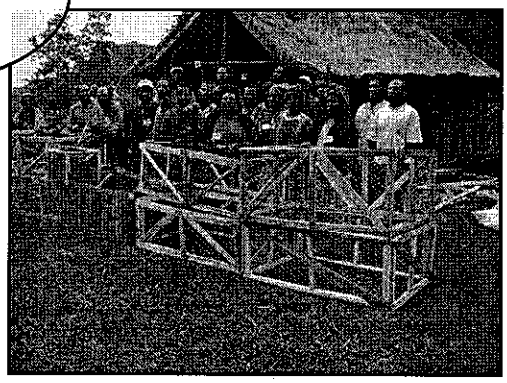
Different styles of nest boxes



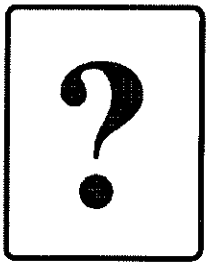


Different styles of brooders



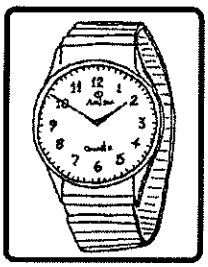


Lesson 6: Repetition and test



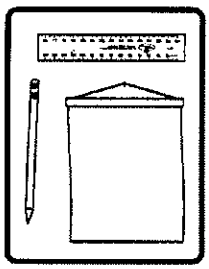
Purpose

To go over what they have learned in the last 3 days and to test the knowledge the participants have gained.



Time

90 minutes



Materials

Questions (see chapter 8.1.1)

Multiple-choice test paper (see chapter 8.2.1)

What to do

1. Repetition questions

Split the participants into two groups and make a competition. Each group has to select a speaker. Ask the first group a question and give them a short time to discuss the answer. The speaker for the first group will give the answer (make sure that the speaker is not acting by himself he needs to consult with the others first). If the answer is right the group gets a point. If the answer is wrong, the second group gets a chance to answer the question. If their answer is right they will receive the point. Now the second group gets the next questions. The group with most points is the winner. See examples of questions that can be used in chapter 8.1.1.

2. Multiple-choice test

Use the multiple-choice test in chapter 8.2.1.

Carefully explain to the participants how the test works and use the first question in the test as an example. Only one answer is correct.

Always ask the participants if all of them can read. You will have some participants in your group who cannot read. Take them aside and do the test with them orally.

Collect all the test papers and mark them. Give the test paper with the mark back to the participants. Go through the test paper with all of them and highlight the correct answers. This is another way of going over what has been taught in the course with the participants.

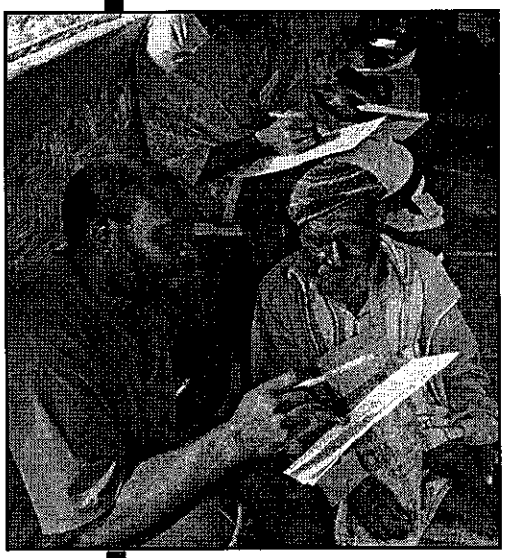
Teaching Notes

Education tip

Reinforcement

Reinforcement means repeating the facts, skills and attitudes in different and interesting ways until they are learned. The repetition and test in this lesson are two ways of reinforcing what they have learned.

Our goal as course leaders is to make sure that the participants know what we have tried to teach them and that they can do the work with confidence. It also helps us as course leaders to measure how well the participants have understood and are able to use the course content. When you, as course leader, see fear, confusion, and uncertainty you may find you have not made sure that the participants know what you have given them first before you go onto the next task and that you have not reinforced what they have been learning enough. There is a saying that says: Do it a thousand times and you have learned it.



Course leader is doing the test orally with a participant who cannot read

5 Second Part of the Training Course - Step by Step

5.1 Timing of the second part of the training course

Before the second part of the training course can be conducted two things need to need to be finished. They are: -

1. Participants must have made their duck shelter, fence, nest box and brooder. As soon as they have finished this task they should tell you and you can start to prepare the second part of the training course.
2. You must get the livestock ready to give to the participants. This can be a quite hard to do as there are not many places where you can get them. Chapter 9.1 gives you some addresses of people or organisations who may have enough ducks for your needs. You should know where you can get these before the course starts because if you cannot supply ducks to the participants it is better not to hold the course.

5.2 Training course Preparations

You or the participants must get the following animals before you can start the second part of the training course:

- 4-5 full grown Muskovi ducks for slaughtering
- Muskovi ducks or ducklings to give to the participants

Ducklings being loaded on the vehicle to be carried out to the village

5.3 *Training course Schedule*

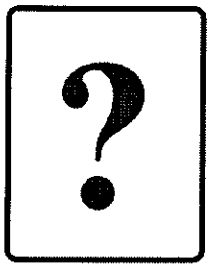
The duck training course can be completed in two days, however, we usually add 4 additional lessons (lesson 10, 13,14,and 15) to the training course. These lessons are not essential to duck farmers but help them to live better lives and should be included if possible.

Training Course Schedule - Second part

Time	Third Day	Fourth Day	Fifth Day
8.00 – 8.30	Devotion	Devotion	Devotion
8.30 – 10.00	**Lesson 7** Welcome; roll call; introduction; inspection of duck houses, nest boxes and brooders	**Lesson 10** Nutrition	**Lesson 14** Integrated farming
10.00 – 10.30		Tea-break	Tea-break
10.30 – 12.00		**Lesson 10** How to kill and cook ducks	**Lesson 15** Gender
12.00 – 13.00	Lunch	Lunch	Lunch
13.00 – 14.15	**Lesson 8** How to handle and sex ducks	**Lesson 12** Breeding with ducks	**Lesson 16** Revision and test
14.15 – 14.45	Break	Break	Break
14.45 - 16.00	**Lesson 9** How to feed ducks; giving ducks to partici-pants	**Lesson 13** HIV/Aids	**Lesson 17** Presentation of certificates and farewell

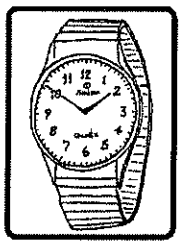
5.4 Training Course Lesson Plan - Second Part

Lesson 7: Introduction to second part of training course



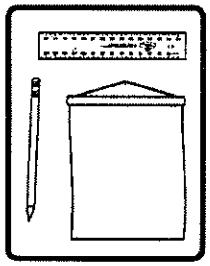
Goal and Purpose

- Opening and welcome
- Roll call
- Training schedule for second part of training course
- To look at and talk about the duck shelters, waterers, nest boxes and brooders of the participants



Time

30 minutes for the opening and half a day visiting the participants' duck shelters



Materials

Training course schedule

What to do

1. Devotion and prayer

Training courses are opened and closed with a prayer. PNG people are well aware of the spiritual world and it is part of their belief.

2. Role call

Make sure that all the participants enrolled in the training course are present.

3. The training course schedule

Show the participants the training course schedule that you have already prepared and explain it to them.

4. Visiting the duck shelters of the participants

Ask the participants to form into two groups or leave them as one group, depending on the circumstances. Make sure that a training course leader heads each group.

The group looks at the duck shelters, fences, nest boxes, brooders and drinkers of each of participant within the particular group. The good and bad points of the work done by each of the participants should be discussed. It is important to emphasise the good points and not to be too critical of the bad points by saying that "You could improve the "nest box" in question by doing this to it" rather than "This is no good and you must change it"! The points to think about when looking at the items include: -

- *Where the shelter has been built*
- *How the shelter has been built*
- *How the nest box has been made*
- *How the brooder has been made*
- *How the fence has been made*
- *How the drinker has been made and*
- *Anything else the farmer has done to make things better for his Muskovi ducks.*
- *Highlight the good things first and be careful with faultfinding. (See education tip below)*

The group then decides if the participant has done enough work and deserves to be given the ducks or if he needs to make improvements to his shelter first before he is given the animals.

Teaching Notes

From experience it helps to make sure that the participants realise how important shelter for the ducks is if the course leaders do not give the ducks straight away to any participants who have not built their duck shelter well enough. Once they have fixed the shelter they can then be given the ducks. It will help the participant to be more careful in looking after their ducks and they are then more likely to be successful duck farmers.

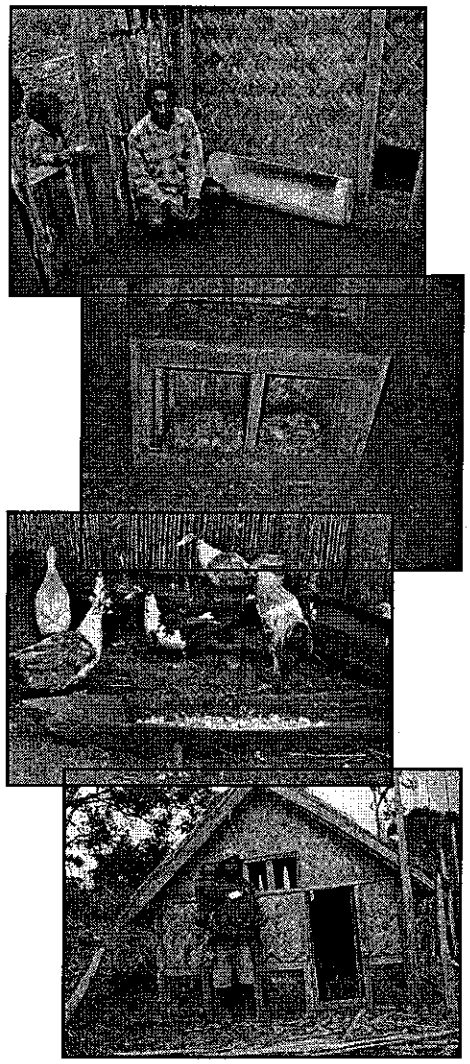
Education tip

Helpful fault finding

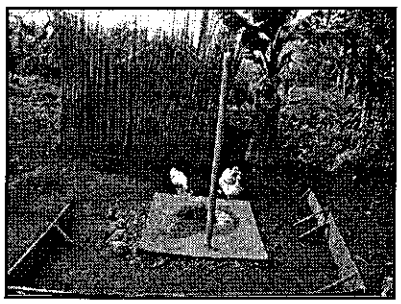
Helpful faultfinding is similar to giving feedback to people. Instead of saying the work someone has done is no good, focusing on their failures and mistakes or even saying they have done so badly they can no longer take part in the workshop, they are given the information they can use to fix what is not quite good enough. Helpful faultfinding tells them that while they have worked hard there is something that needs to be fixed because it could cause trouble later if it is not corrected. For example you could say "You have put a lot of work into building your duck shelter but this fence is not very strong and dogs may get through it into the duck shelter and kill all the ducks. If you want to make sure that this doesn't happen you could put some stones along the fence so that the dogs will not dig a hole under it and kill your ducks".

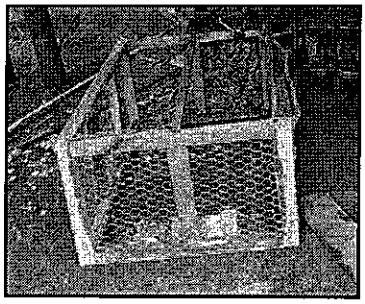
You could say when you are looking at a fence that is built strongly, "This fence is built so that dogs will not be able to get through it and kill the ducks". Those who have not done a good job with their fences will take note and improve theirs. This kind of praise about a job well done gives the same results as helpful fault finding without causing shame to anyone.

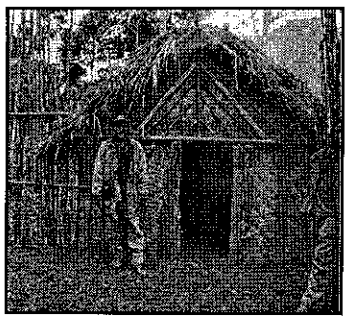
In general, fault finding, helpful or not, does not have to be used very often. Course leaders can fault find too often when they do not know how to use feedback properly. Make it a rule to use feedback with praise 5 times as much as you use helpful faultfinding.



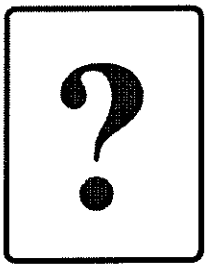
Well built duck shelters, brooders, drinkers and nest boxes







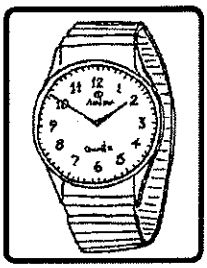
Lesson 8: Duck handling and duck sexing



Purpose

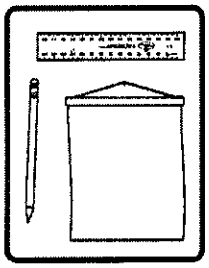
How to handle ducks

How to tell the difference between female and male ducks



Time

1 hour



Materials

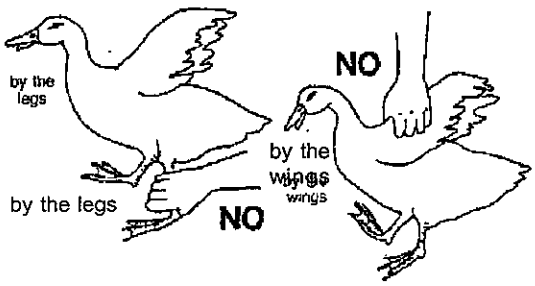
- 1-2 grown up Muskovi ducks (if possible male and female)
- 3 young male Muskovi ducks
- 3 young female Muskovi ducks

What to do

1. Show the participants how catch, hold and carry ducks

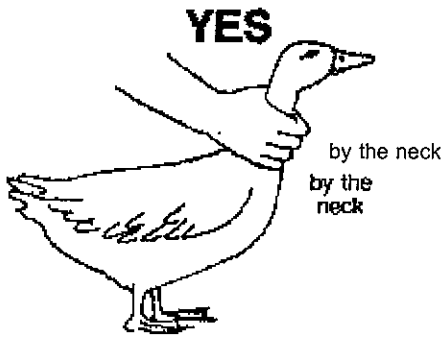
Some important points to talk about include: -

- The legs or wings of a duck can be hurt or even broken easily. Therefore, never catch or hold a duck by the legs or the wings.



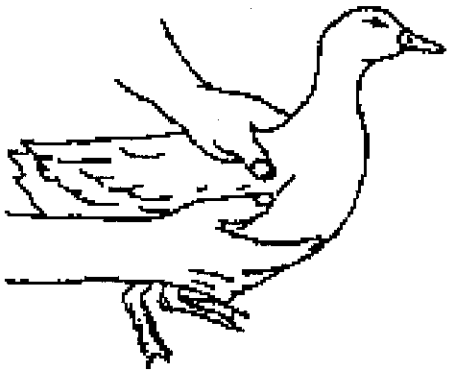
Do not hold ducks like this! Never hold ducks by their legs or their wings

- To catch a duck, grasp it firmly but gently at the base of its neck.



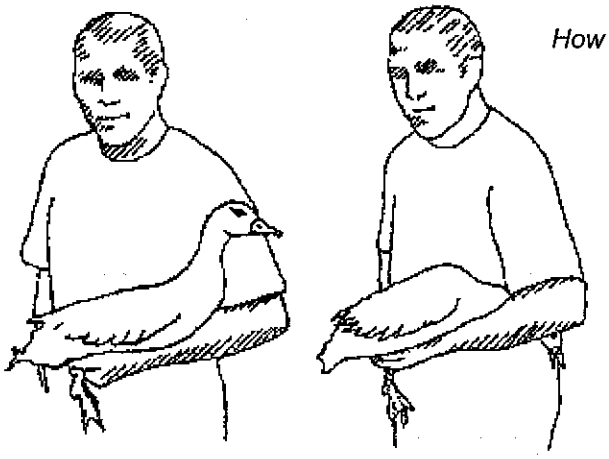
Catch a duck by the base of its neck

- You can also catch or hold a duck by holding its wings against its sides with a hand on each side of its body and a thumb over each wing.



How to hold a Muskovi duck properly

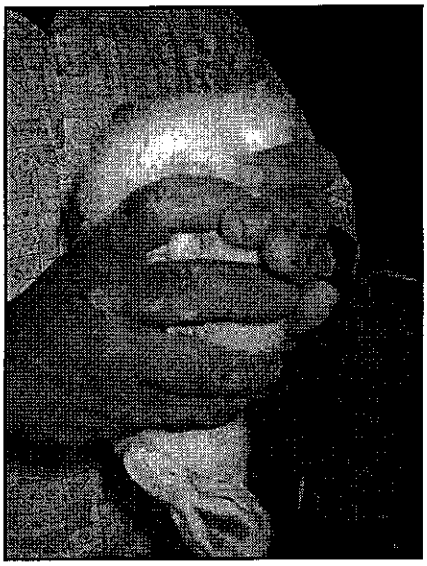
- Hold the duck's wings against its sides
- After you have caught a duck, slide one hand under its body and hold its legs firmly. Then you can rest the body of the duck on the lower part of your arm and carry it easily.



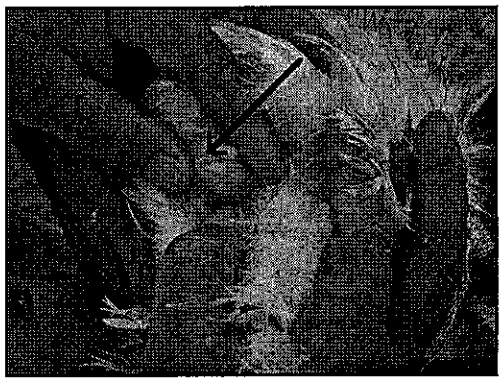
How to carry the Muskovi duck

2. Sexing ducks

- Hold the duck so that the head is down and the tail is up. Bend the tail down to its back and fold the wings together. Use both of your hands to hold it.
- Get somebody else to help you. Check the anus. You have to go quite deep to see if the duck has a penis and is a male or doesn't have a penis and is a female.



How to hold the duck for sexing



Male duck with a needle size penis

Female duck with a vulva

Teaching notes

Ask each participant to come to the front where they show everyone how to catch, hold and carry a duck as mentioned above.

Then get the participants to form pairs to sex at least 2 ducklings (female and a male). Check to make sure that they can do it properly. It is important for the participants to know how to sex ducks as it is the only way they will know what kind of duck they are looking after and which ones they can sell or eat without getting rid of their breeders.

Education tip

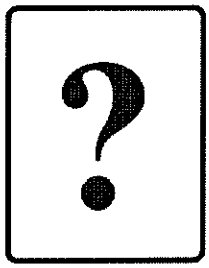
Revision

Whenever you give important information to course participants you should take a few moments to see if everyone can do what you have shown them. Ask a few people who you think may not be sure how to sex ducks properly to check one or two ducks and say if they are males or females. If they do not get it right, show everyone the method again and then check one or two again to see that they really know how to do it.

Not checking for understanding is one of the most common mistakes trainers make when running training courses and teaching. (I still have to remind myself to check that people know what I have been teaching them).

Photo 40-41: Grown up female and male Muskovi ducks

Lesson 9: Feeding ducks and distribution of livestock

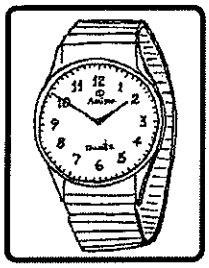


Goal and Purpose

To learn what foods ducks can eat

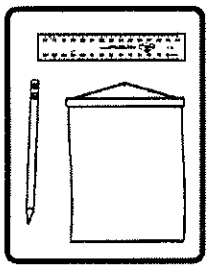
To learn about the water needs of ducks

To learn how ducks will affect your garden



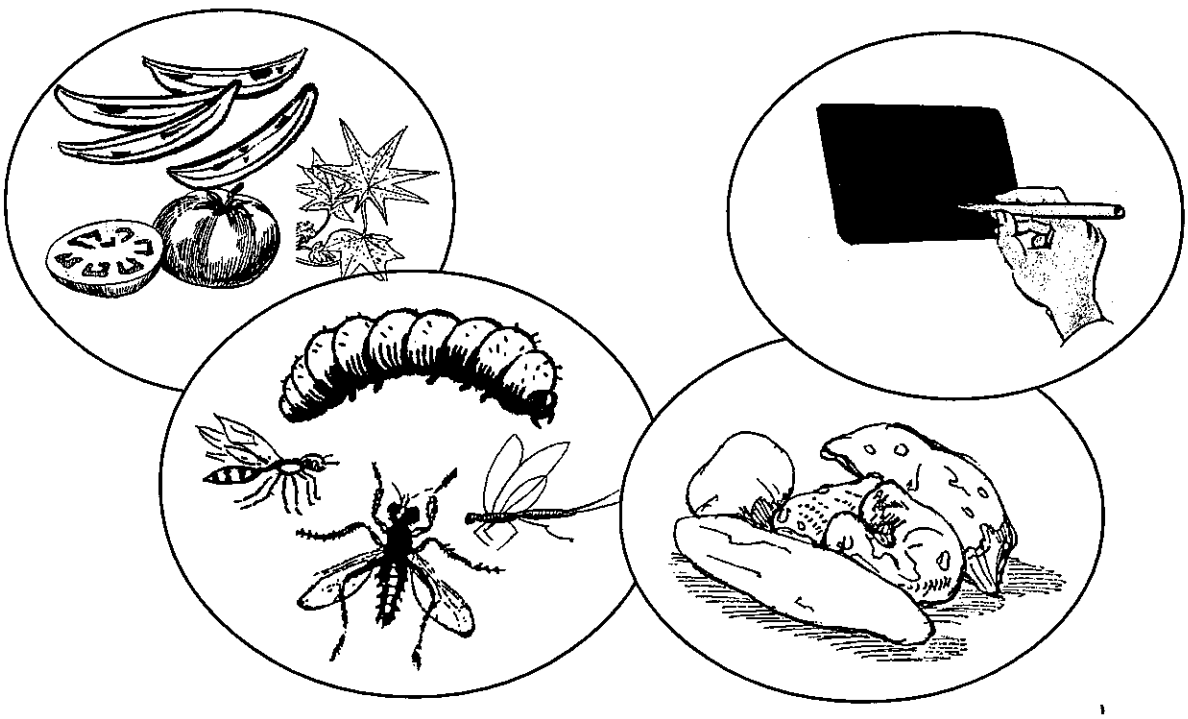
Time

60 minutes



Materials

- Black or white board
- Chalk or white board marker
- If available, some of the types of foods that ducks like such as soft greens, worms, seeds, sweet potatoes, overripe or damaged vegetable and fruits.



What to do

1. The types of foods that can be fed to ducks

Ducks eat similar food to chickens, except that ducks like more greens than chickens.

Ask the participants to find foods that they think are good for Muskovi ducks to eat. Give them about 10 minutes to collect various foods from around the village. When the participants come back lay out the food they have collected on the floor and discuss the different food items. See if they have collected all the foods mentioned below.

- Insects, worms, slugs, snails, frogs
- Damaged or overripe fruit and vegetables
- Sweet potato, cassava, taro
- Seeds, grain, other types of plant material
- Materials left on the ground after harvesting crops
- Grass, weeds, roots (cooked choko leaves and fruits are very good for ducks)
- Most water plants
- Left over food from your kitchen

Rules for feeding

Muskovi ducks need all kinds of food and will not grow well if they are fed only one kind of food.

Ducks eat just about everything so it is not hard for them to find enough food for themselves as long as they are let out of the fenced area and they can walk around. Grown up ducks should be let out of their fenced shelter as much as possible. Just lock them in at night!

Clean their food dish every day. Don't give them too much food or they will not be able to eat it quickly and it will go bad. If ducks have to eat bad food they will get sick and die.

Photo 42: types of duck food

2. What kind of food can you feed to ducklings?

Special care must be taken when feeding ducklings

Ask the participants the following questions: "What kind of food do ducklings need?" Write the answers on the white board and discuss the answers. See if they have mentioned all the types of foods listed below?

- Cooked sweet potatoes, cassava and taro (energy foods)
- Insects, worms, dried fish made into a powder, cooked beans (protein foods)
- Cooked greens

- Stock feed is the best kind of food if you can get it (protein and energy food mixed)
- Left over food from your plate

Summarise:

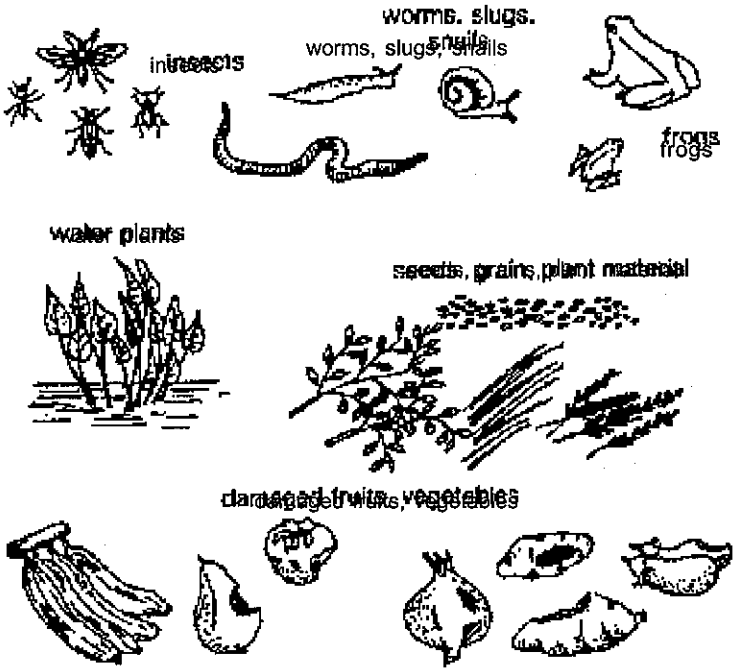
Clean the food dish every day. Don't give them too much food or they will not be able to eat it quickly and it will go bad. If ducklings eat bad food they will get sick and die.

3. Water

Muskovi ducks need clean, fresh water with their food. They should be able to get water all the time.

They also need some water to be able to keep their eyes clean.

Most ducklings die because they drown in water or they get wet and cold when they drink and die from cold. Make a special drinker for the ducklings that will stop them from drowning or getting wet.



Good foods for ducklings

Photo 44: Drinker for ducklings

Photo 45: Drinker for grown up Muskovi ducks

4. The effect ducks can have on your backyard garden

Ducks like to eat your young plants so they must be kept out of your garden when the plants are young. After most plants have grown big, you can let your ducks feed between the rows as they will not cause too much damage to older plants and will help to keep weeds and pests down.

It is good to let the ducks into your garden after you have harvested your crops. The ducks will find a lot of food that is very good for them which would otherwise be wasted.

5. Limestone

It is very important that ducks get limestone to make strong eggshells. If they are short of limestone they may start to eat their own eggs. We found many farmers whose ducks were doing this.

The ways you can make sure your ducks get enough limestone are: -

- From eggshells. If you eat any eggs give the eggshells to the ducks
- By giving ducks some of the white powder people use when chewing beetle nut.
- If you live close to the sea, by giving the ducks sea shells or broken coral,
- By giving the ducks ground up limestone, if there is any near where you live.

6. Giving the ducks out to the participants

We recommend that at this point of the workshop the livestock is given to those participants who finished the jobs you asked them to do well. (Duck shelter, nest box, brooder, and fence). In our training courses we give the participants 1 male and 2 female ducks.

Teaching Notes

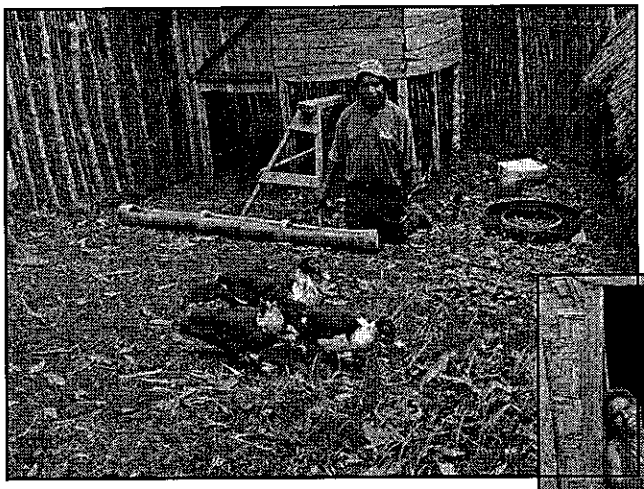
Feeding is the most important lesson. Most farmers find it hard to feed their ducks properly. Therefore, it is important that you reinforce this lesson and that you check for understanding.

Education tip

Making your lessons enjoyable and interesting

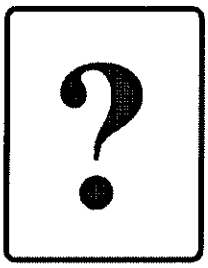
To make your course interesting and enjoyable for the participants they should feel: -

1. That they are happy and comfortable. You can make them fell happy and comfortable by ensuring that they do not feel shamed because they sometimes give a wrong answer, by helping them to feel they do know some answers and are not stupid, by showing them that you like them and by not appearing to be too bossy.
2. That they do know something: Make sure that you always say they have answered or done well ("That was a good question" or "Thank you for your contribution") so that the participants can see that their effort is worthwhile.
3. That they are learning interesting things: The lesson should have some parts that are new, challenging and rewarding.
4. That they can help the workshop to be better: Participants are encouraged to say what they think whenever possible. Let them go and select the feed they think is suitable for the ducks and tell why they selected the feed.
5. That they are learning information that is of use to them: The participants need to be able to use the skills, knowledge or attitudes you are giving them in the workshop to make a difference in their lives now.



Ducks feeding and drinking

Lesson 10: Nutrition



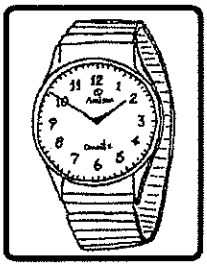
Goal and Purpose

To learn what the purpose of food is

To learn how much food we need to eat each day

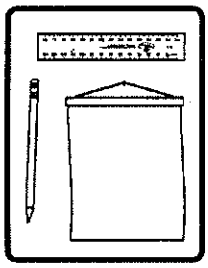
To learn which foods are good for our bodies

To learn what we need water for



Time

60 minutes



Materials

White board

Different types of food

What to do

In this lesson it is important that you make sure the participants give you most of the information about foods. People know about their food and what is good for them. Just help them to recall what they already know and add some more information about nutrition.

1. What is the purpose of food?

Ask the participants "What is the purpose of food"? See if they have mentioned the purposes mentioned below.

- Food helps us to grow
- Food helps us to stay healthy and strong
- Food helps us to work
- Food helps us to enjoy life

2. How much food do we need each day?

Ask the participants; How much food does a person need each day? Write the answers from the participants on the white board and discuss the answers. See if they have mentioned all the points listed below?

- Little children need small amounts of good quality food many times a day. Breasts milk is best for babies.
- Young people need lots of food because they are growing
- People who work hard or are breast-feeding a baby need lots of food.
- People who play cards the whole day or are old do not need as much food as the people who work hard or are breast-feeding a baby.
- Too much food or unhealthy food is not good. Fat people have many health problems and need to be careful about the type and amount of food they eat if their health is to improve.

3. What is good, healthy food?

Most food is good for your body as long as you do not eat just one type of food. Three types of food are essential for our body: energy food, protein food and protective food.

Ask the participants to form into three groups. Call the first group: the protein group, the second group: the energy group, and the third group: the protective group.

Now ask each group to go out and find foods that correspond with their group. Give them about 10 minutes to collect various foods. When the participants come back ask them to lay out the food they have collected on the floor.

The three groups who collected the examples of types of food in the exercise above should say how the various foods they collected are used in the body.

Interact with the groups and see if they covered more or less what is mentioned below about each food group.

Energy food

Energy food is like the diesel for our body. Energy helps our body to work hard and to stay warm. Children need plenty of energy to grow and play and walk to school. Women who are pregnant or are breast-feeding babies need lots of energy.

Look at the pile of energy foods and ask the participants to give you the names of some other foods that belong to the energy food group. Write the answers from the participants on the white board and discuss the answers. See if they have mentioned all of the foods listed below.

Sweet potato cream	Taro	Potato	Bread	Coconut
Sugar	Sago	Banana	Noodles	Margarine
Flour	Corn	Cassava	Oil (dripping)	
Rice	Breadfruit	Yam	Pig fat	

Photo 59: Types of energy foods

Protein food

Protein is like the building material when you build a house (timber, bamboo, pitpit, bricks). Protein helps to build the cells and muscles in our bodies. Because children are growing fast they need to build a lot of cells and therefore they need a lot of protein or bodybuilding food.

A child who is not given enough protein to eat is very likely to get sick and may even die. Such a child is like a house that falls down in strong wind and rain because it is not made strong enough.

Protein is also needed to repair damaged part of our body (cuts, injuries, etc.).

Look at the pile of protein foods and ask the participants to give you the names of some other foods that belong to this group. Write the answers from the participants on the white board and discuss the answers. See if they have mentioned all of the foods listed below.

Protein foods that come from animals	Protein foods that come from plants
Milk	Beans
Meat	Peanuts
Fish	Nuts
Eggs	Peas
Crabs, Frogs and Prawns	Coconut
Cheese	

Photo 60: Types of protein foods

Protective Food

Protective foods help to stop you from getting sick. Protective nutrients in the food are called Vitamins and Minerals. Many of the protective foods help to stop us from becoming sick.

Look at the pile of protective foods and ask the participants to name other foods that belong to the protective food group. Write the answers on the white board and discuss the answers. See if they have mentioned all the foods listed below.

Vegetables	**Fruits**
Pumpkin tips	Pawpaw
Aibika	Guava
Cabbage	Mango
Bush greens	Mandarins and Oranges
Carrots	Lemons
Pumpkin	Bananas
Tomatoes	Pineapple

All fruits and vegetable can protect us.

Photo 61: Types of protective foods

Photo 62: Participants sorting different foods into the three groups

Ask two participants to summarize what they have learned about food groups and which kind of food belongs to which group. They need to note that many foods belong to more than one group.

At the end of the lesson make sure you mention again that our bodies need many different kinds of foods so we can be sure that we are eating enough of each of the 3 main food groups to keep us from becoming sick. Children need more protein than adults but also need plenty of the other food groups as well. Only a balanced diet will keep us healthy and strong.

Teaching Notes

Education tip

Groupwork

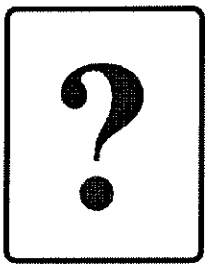
Working as a group is a way of making it easier for adults to learn as well as a good way to work. What happens in the group is often what is happening every day. When people work as a group they are able to use the skills and knowledge of each group member so that together, they can do something that is better than anything any one of the group members is able to do by themselves. The group works together to find a solution to the problem they have. It can be more fun to work in a group as no one member of the groups needs to know everything. Competing between groups can also add to the fun of learning.

If you want to train men and women how to do a particular job and how to practice new skills, getting them to work in small groups to try out new skills and to work out answers to question is a very good way of getting them to learn. In PNG where people are already used to working together as a group in their culture working as a group brings good results. People seldom learn by themselves and feel happy when they are sharing responsibility.

Teachers can put participants in a group with friends as it is easier for them to work with people they already know so they can gain as much as possible from the group. This makes it easier to do difficult tasks. If you, as a teacher, see a couple of the members of a group are not working well together, you should stop the trouble from affecting their learning by shifting them to different groups.

When you are deciding who should go in which group it may be best to form groups in which the members are about the same age or are either male or female.

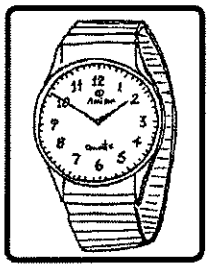
Lesson 11: Killing and cooking ducks



Goal and Purpose

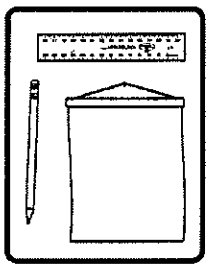
To learn how to kill ducks

To learn how to cook a duck



Time

30 minutes classroom teaching
& practical



Materials

Ducks to kill

Knives

Buckets

Hot water

Ingredients to make a soup

What to do

1. How to kill ducks

There are many ways to kill an animal but many of them will be painful for the animal. We found the best way to kill a duck quickly is to chop off its head with a bush knife.

Once the head is chopped off and the bleeding has stopped you dip them into hot boiling water to help make it easier to take the feathers off. They are then prepared in the same way as you get a chicken ready for cooking.

2. How to cook a duck

Duck meat is tougher than chicken and will need to be cooked a bit longer than it takes to cook a chicken, otherwise it is cooked the same as chicken.

Teaching Notes

Here is a simple recipe using duck meat:

Duck and Spinach (greens?) (kumu) in Coconut Cream

You need:

1 duck

2-table spoon oil

2-tea spoon salt

11/4 cups coconut cream

3-table spoon butter

4 hands of spinach (greens) (kumu)

Method:

1. Take the bones out of the duck and cut the meat into thumb sized pieces
2. Heat the oil in a pot, add the cut up the duck meat and cook it until it is brown
3. Add the salt and ¼ cup coconut cream.
4. Cover and cook slowly for 30 minutes
5. While the duck meat is cooking, melt the butter (or you could use oil, instead) in another pot and add the spinach (greens)(kumu).
6. Cover and cook slowly
7. Add the cooked duck meat with the remaining coconut milk, bring to a boil and serve it with sweet potatoes or rice

Education tip

Learning by using all our senses

When we come across something new we find out about it by looking at it with our eyes, hearing about it with our ears, smelling it with our noses, touching it with our fingers and maybe tasting it with our tongues. After we have used our senses to get to learn all we can about it we think about it with our minds so that when we come across it again we will remember what it is. The more of our senses we use in finding out about something the better we are likely to remember it. If we only use our ears to hear about something new and do not see it with our eyes or touch it with our hands we are less likely to remember it.

Using one or more of our senses to find out about something is called learning. When you prepare a lesson we should always try to get the people we are teaching to use as many of their senses as possible. Thus, you could either teach your participants how to kill a duck by:

1. Simply telling them how to do it,
2. Or, better still, showing them how to kill a duck by killing one yourself while they are watching,
3. Or, even better yet, first telling them how to do it then showing them how to do it by doing it yourself while they are watching and finally, get each of the participants to actually kill one themselves. If they then eat the duck they have killed they will be using another sense which can help them to learn the job even better.

If you get your participants to use a combination of senses as is shown in the learning method in 3 above, they are much more likely to be able to kill a duck properly again in the future than if you try to teach them using only the method in 1 above.

Participants killing a Muskovi duck

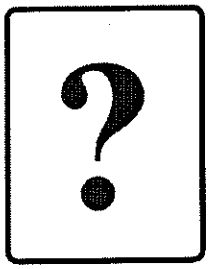
Allowing the duck to bleed

Pouring hot water over the duck

Cleaning the duck and cutting it into pieces

one picture is still missing

Lesson 12: Breeding ducks and raising small ducklings

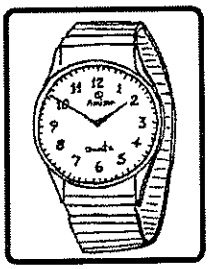


Goal and Purpose

To learn how to pick a good breeding duck.

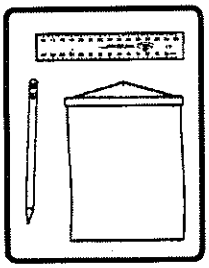
To learn when ducks start to lay eggs and how to make sure the eggs are good for hatching

To learn how to look after small ducklings



Time

60 minutes



Materials

- Black or white board
- Chalk or white board marker
- If available a good breeding male duck and a good breeding female ducks

What to do

1. How can I pick a good breeding duck?

When the ducks are about 4 months old they are ready for breeding. At this time the farmers has to choose the ducks he will keep for breeding and those he will eat or sell.

Ask the participants to tell you what a good breeding duck looks like. Write the answers on the white board and discuss. See if they have mentioned all points listed below. (If possible have good, healthy male and female ducks to show the class)

- They will be healthy and strong
- They will be the fattest and heaviest ducks in your flock (female 2.5Kg / male over 3 kg)
- The belly of the duck will hang down close to the ground.

It is best to keep less than 10 breeding ducks. If you keep more than 10 ducks you will have trouble finding enough food and greens for them from your garden. Keep only one drake (male duck). If you keep two or more drakes they will fight with each other and disturb the breeding female ducks.

Female ducks can be kept for about 3 years while drakes need to be replaced every second year.

Photo 48: Good, healthy female

Photo 49: Poor, skinny female

Photo 50: Good, healthy male

Photo 51: Poor, skinny male

Photo 51.1: Good and poor ducks

2. When do ducks start to lay eggs and what kind of eggs will hatch well?

Ducks will start to lay eggs when they are 9 – 12 months old. The first eggs a duck lays will be small and should not be used for hatching.

If your duck is not laying eggs after 12 months there is something wrong. Probably the duck is not getting enough food and may be short of protein. A healthy female Muskovi duck should weigh more than 2kg. If she does not start to lay eggs before she is 18 months old it is better to kill and eat her.

Only duck eggs that have a diameter of 45mm or more should be used for hatching as ducklings hatching from smaller eggs will either die or be small and weak. Make a round hole exactly 45mm in diameter in a sheet of plywood. If the egg can fit through the hole, it is too small and must be eaten or sold.

Photo 52: Egg measuring tool

A duck will lay 10 and 20 eggs over a few weeks and then she stops laying and becomes broody and sits on her eggs. Once she stops being broody she will start laying again. There is usually a gap of about 2-3 months between each lot of eggs she lays while she is broody.

We receive many reports from villagers that their Muskovi ducks are eating their eggs.

A way of solving the problem is to make a two or three artificial duck eggs out of clay and put them into the nest box once they have dried and gone hard (You also can paint them white with white paint or some white powder). When the female duck lays her own eggs, remove her eggs and keep them in a cool safe place in your house but leave the clay eggs in the nest box. She cannot harm the clay eggs. Once the female duck starts to stay in the nest box sitting on the clay eggs all the time, you remove them and put the true eggs in her nest for her to sit on.

Clean the eggs with a damp cloth before you put them under the broody duck.

Correct number of eggs for hatching underneath a brooding duck

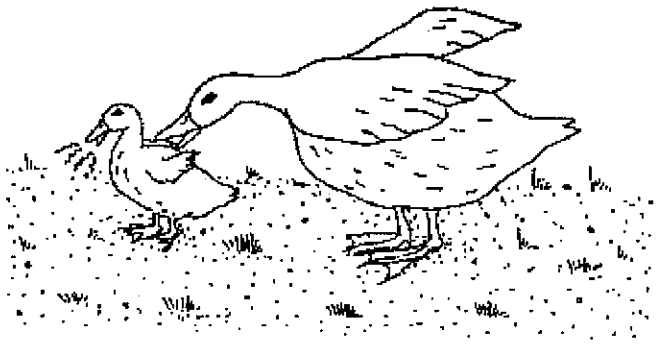
Clean the eggs before you put them underneath the brooding duck

Photo 52.1: Eggs made out of clay

It is best to put the nest box with the duck and her eggs into the brooder or at least separate her from the other ducks so that they do not disturb her or break her eggs while she is brooding.

The advantage of managing your laying ducks and their eggs in this way is: -

- The eggs are not eaten by the mother or other ducks in the duck house
- The eggs are less likely to be stolen or broken by dogs, rats, snakes, children or other animals
- A single duck cannot hatch more than 12 eggs at one time so if she lays more than 12 eggs, you can eat the extra ones.
- You can pick the largest eggs for her to hatch and eat the smaller ones. The large eggs hatch better than the smaller ones.
- Once the ducklings hatch the other ducks and particularly the male ducks cannot kill them as they are protected in the brooder



Keep the young ducklings separate from the rest of the flock so big male ducks or other ducks cannot kill the ducklings

Muskovi ducks are very good brooders. It takes the eggs 5 weeks (35-37 days) to hatch. As a rule, do not try to help the ducklings out of the eggs. They can to get out of the shell themselves.

If the egg looks shiny and white and if it stays warm even if the broody duck left the nest for a while, it is a good egg. Unfertile eggs cool of quickly once the broody duck left the nest box.

Photo 53: Muskovi duck sitting on eggs

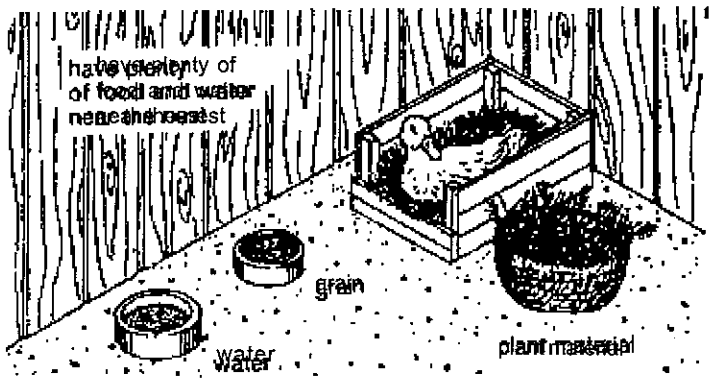
If the egg looks blue or has blue spots or streaks the eggs is bad and must be thrown away.

Photo 54: Shiny healthy egg

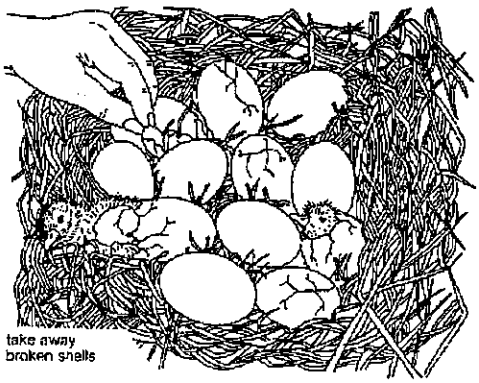
Make sure that there is food and water near the duck. If the brooding duck has to walk a long way to find food and water the eggs may get cold while she is away and will not hatch.

When all the eggs in the nest have hatched, remove the eggshells, clean the nest and put some fresh bedding material in it.

Photo 55: Egg with blue spots. This egg is bad and must be thrown away



Make sure that water and food are near the brooding ducks



Remove the eggshell from the nest after the ducklings hatch

3. How to look after small ducklings

Small ducklings need special care. It is best to raise the ducklings away from the rest of the flock as quite often drakes and other ducks will peck at and kill very young ducklings as they come out of the nest.

This is the main reason we suggest that you build the brooder mentioned in XX. When the ducklings have hatched put the brooder beside the fire in your house or in another house.

Provide stock feed or cooked food for the ducklings at all time and make sure they have water as well. Otherwise many will die.

Take the mother out of the brooder after about 2-3 weeks and leave the ducklings in the brooder so that you can feed them properly and keep them warm.

Cover the brooder with an old bag during cold nights especially when the mother is not with the ducklings.

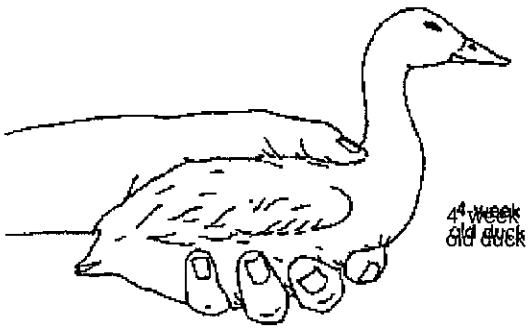
Photo 56: Ducklings and mother in the brooder

Let the mother and ducklings out of the brooder into the sun for a few hours every day but watch them carefully. Walking around in the sunlight will help the ducklings to get strong and healthy.

Photo 57: Brooder covered with bags and cloth

After 6-8 weeks you can take the baby ducks out of the brooder and put them into the duck shelter along with other adult ducks.

Photo 58: Mother duck walking in the sunlight with her ducklings



Size of the duckling when you can move them from the brooder to the duck shelter

Teaching Notes

Education tip

Clear Roles

When you teach adults and try to get them to take part in the lesson they can sometimes try to take over the training course or decide what will be taught in the course. It is important that you and the participants know the difference between making suggestions and making decisions. The course leaders should make the decisions about what is taught in the course but should listen to suggestions made by the participants and possibly change the course content a little if the suggestions will make the course better.

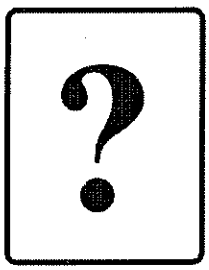
There needs to be trust and respect between the course participants and the course leaders. For trust and respect to happen it is important for the leaders to spend enough time with the participants away from the class as well as in the class.

To make sure this happens we have a rule which says when we visit a village or conduct training with farmers we must stay with them for more than just a few hours. This means that you should spend at least a night with the group. Time spent talking and doing things with adult learners when you are not teaching them makes it much easier for them to

- Ask you hard questions,
- Disagree with a point you have made or
- Listen to what you have to say about something they have thought of.

Sleeping in the village and eating with the participants creates a strong relationship of trust and respect which helps to make your teaching successful. This relationship of trust and respect will help the learners to feel happier to try the new ideas, skills, techniques and attitudes that they learn about in this kind of course.

Lesson 13: HIV/AIDS

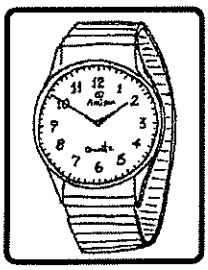


Goal and Purpose

To introduce participants to the basic facts about HIV/AIDS

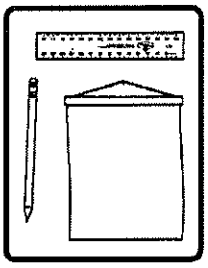
To teach participants how HIV/AIDS spreads.

To teach participants how the spread of HIV/AIDS can be prevented.



Time

90 minutes



Materials

White board or chalk board or butcher's paper

Handouts on HIV/AIDS (see documents attached in chapter 11.2)

Other material is freely available at all Provincial HIV/AIDS offices or can be ordered from the Secretary of National AIDS Council (see addresses in chapter 9.1)

What to do

It is important that you do a lot of talking with the participants in this lesson. People usually know something about HIV/AIDS but they are often not sure about it and are afraid of it. Help them to recall what they already know, correct them if their knowledge is wrong and give them some more information if necessary.

1. What is HIV/AIDS?

Ask the participants to form into groups of 5 to work out an answer to the question; What is HIVAIDS?

Ask each group to report the answer they have worked out to the entire group and write the answers down on butcher's paper. Give them about 10 minutes to come up with an answer. See if they have mentioned all points listed below?

- HIV is the name given to the small germ (virus) that causes AIDS.
- HIV stands for;

  H > Human

  I > Immuno

  V > Virus

- AIDS stands for;
  - **A** > acquired
  - **I** > immune
  - **D** > Deficiency
  - **S** > Syndrome
- AIDS does not have a cure
- People can have HIV/AIDS but not show any signs of sickness for many years.
- HIV/AIDS can be spread during sex.

2. How is HIV/AIDS spread and how can its spread be stopped?

Ask the participants to go back into the same groups to answer the new question above.

If they can write ask each group to write down on butcher's paper what they know about the transmission of HIV/AIDS. Give them about 10 minutes to write their answers.

Each group presents their answers to the entire group. See if they have mentioned all points listed below?

HIV/AIDS is Transmitted	HIV/AIDS is Not transmitted
1. During sexual intercourse	1. By hand Shaking
2. From sick mother to child at birth	2. By sharing a toilet
3. From tattooing needles	3. By insect bites
4. From skin piercing instruments	4. By coughing
5. In the breast milk from sick mothers to their child	5. By touching & hugging
6. From used syringes & Needles	6. By sharing eating utensil, clothes, food, water, etc.

3. How is HIV/AIDS prevented?

Ask the participants to go back in to the same groups and answer the question above.

Ask each group to write their answers down on butcher's paper. Give them about 10 minutes to finish their answers.

Each group then presents their findings to the entire group. See if they have mentioned all points listed below?

- **A** bstinence (not having sexual intercourse)
- **B** e faithful to one sexual partner
- **C** ondom (using a condom each time you have sex)

Teaching Notes

Education tip

Use well thought out questions to create interest and revise learning

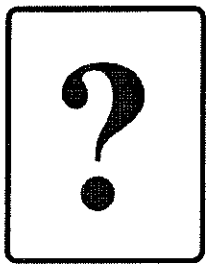
Well thought out questions make the instructor and the participants learners together. These types of question help participants to make a connection between what he or she already knows and what is being presented. Such questions cause participants to:

- Try to work out why something is so
- Try to put ideas they have heard about into practice
- Try to check that something is true or not
- Try to see if one thing is better than another
- Try to work out how to tell someone else about what they are being taught.

The table below gives you some examples of questions that encourage participants to think carefully and thoughtfully about what they have been taught.

Examples of well thought out questions
What is another example of .....? *(What is another example of a good protein feed for ducks?)*
How could ..... be used to ..... ? *(How could duck manure be used to help your vegetables?)*
What could happen if.....? *(What can happen if many male ducks share the same shelter?)*
What are the strengths and weaknesses of .....? *(What are the strengths and weaknesses of Muskovi ducks?)*
What do you already know about .....? *(What do you already know about HIV/AIDS?)*
Explain why ....., Explain how ..... *(Explain why it is important to have a fence around the duck shelter)*
What is the difference between .....? *(What is the difference between Muskovi ducks and True ducks?)*
How can you stop this problem .....? *(How can you stop ducks eating their own eggs?)*
Do you think that what has been said is right or wrong .....? *(Do you think that all women are made to help men?)*
Why is it important.....? *(Why is it important to separate ducklings from other ducks?)*
How does ..... affect.....? *(How does HIV/AIDS affect the community?)*
What do you think causes .....? Why .....? *(What do you think causes ducks to eat their own eggs? Why.....?)*

Lesson 14: Integrated farming



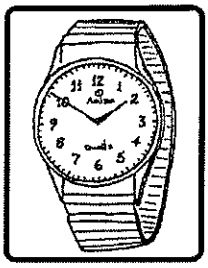
Purpose

To look at the garden system that was used by our grand-parents

To look at how our garden system works now

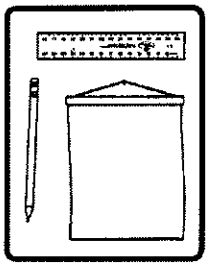
To see if there is any way we can improve our garden system now

To learn what integrated farming is?



Time

60 minutes



Materials

White or black board

What to do

1. What were gardens like in our grandparent's day?

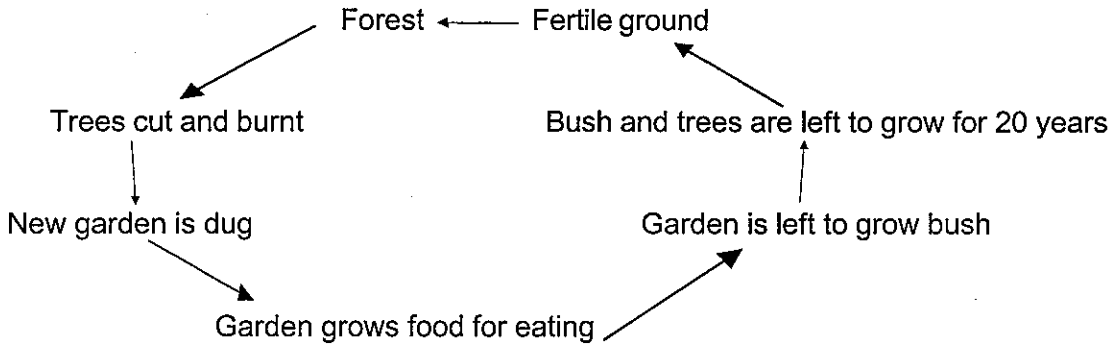
Ask the participants the following question: What kind of gardens did our grandparents work? Let them tell stories about their grandparents. Write the answers from the participants on the white board and discuss. See if the stories they tell include the points mentioned below?

In the days of our grandparents there was lots of ground and forest for every-body.

- Lots of fertile ground available
- There were not as many people in the village as today
- There were thick forests and trees in many places
- The ground grew good crops when the thick forests were cleared for gardens.
- There were lots of wild animals in the thick forest.
- It took a lot of hard work to cut down trees with the stone axes people had so they did not cut down much forest for gardens.

- There were no sawmills to buy the trees that were cut down for money.
- It was harder to start a bush fire as there were no matches. (Today many young people make lots of bush fires which burn bushes, young trees and forests)

Garden system of the old days

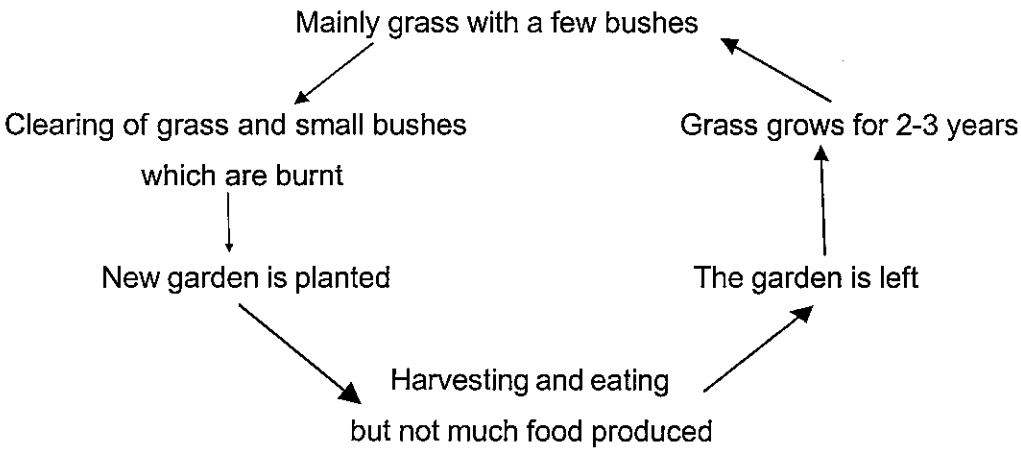


2. What happens today in our gardening system?

Ask the farmers what happens today to our gardens? Let them tell their stories. Write it on the white board. See if they mention some of the things below?

- There is less forest, bush and fertile ground
- There are many people living in PNG
- Some parts of the country with lots of people have few trees and forests left in them.
- New tools such as steel axes, chainsaws and sawmills make it easy to cut trees
- There are many places where there is only grass
- Gardens are used again after only a short or no break.
- The ground is less fertile and the crops produce little food.
- It is harder to find wood for fires and timber for building our houses

Garden system today



3. How can we improve our garden system?

There are a number of things that can be done to help gardens produce more food. These include: -

➢ **Don't burn grass and bushland**

- When you burn your grass and bush land the little trees that are growing in the grass are killed. These trees are the forest of the future. These trees are needed so that there will be trees for your children to use to build houses and fences when they grow up.

Photo 68: Young trees growing in grassland

- When you burn grassland natural fertilizer is lost. It is best to make use grass and leaves that you collected from clearing the ground and then pile them in a heap or just cover them with soil when you dig the garden. The leaves will rot and form compost which is used as a natural fertilizer.

Photo 69: Compost heap with dried grass and leaves

Photo 70: Hole filled with grass and other organic material

Photo 71: The hole is covered with a layer of soil and a banana sucker is planted

➢ **Plant trees in your new garden at the same time you plant your sweet potatoes, cassava or vegetables**

- Grow some Yar or other forestry seedlings in your backyard that you can plant in your garden.

- When you plant a new garden, plant some Yar or other tree seedlings in between your sweet potatoes, cassava, banana or vegetables. After two years when you move to another place to start a new garden your Yar seedling will have grown up. The yar trees will help to fertilize your old garden plot and prevent erosion and loss of the good soil.

Photo 72: Yar tree seedling in the backyard

Photo 73: Yar planted with other crops in a garden

Photo 74: Very fertile ground between Yar trees in a garden near Onamuga

➢ Use animal manure

Animal manure mixed with the soil will help you to grow strong and healthy vegetable seedlings in your nursery. Mix duck manure with good soil (1 spade of soil and 1 spade of duck manure). Animal manure can also be put straight onto your vegetable garden.

To use manure in your vegetable garden make a mixture the same as for the nursery (1 spade of soil and 1 spade of manure). Make a hole with the spade in the soil and fill it with the mixture. Plant your seed or seedling into the manure/ soil mixture.

Photo 75: ½ soil and ½ manure mixture is put into the hole in the garden

Photo 76: Cabbage seedling planted where the manure has been put in the soil

➢ Make compost

Compost is made from all kinds of plant rubbish or waste. Once this plant waste has changed into rotted compost it is better for your garden than any fertilizer you can buy in a store.

Use the rotted compost in the same way you use animal manure as explained above.

Another way to use the plant waste is to dig a hole in the ground and fill it with all kind of plant material. Put a layer of soil on top and then plant some bananas or trees into the hole with the plant rubbish.

Photo 77: Compost heap

➢ Use erosion control measures

Erosion can be controlled by: -

□ Using a Mulch

When you cover the soil with a thick layer of leaves, grass, tree branches, etc. this is called mulching. Mulching helps to:

- Reduce loss of water from the soil
- Reduce erosion (loss of fertile soil)
- Stop weeds from growing

□ Planting Vetiver Grass Hedges

If you plant vetiver grass plants close together in a row/hedge in your garden they will stop the water from washing the good top soil away and help to stop land-slides. The hedges should be planted across the slope. A vetiver grass hedge can be planted on the bank of a river to stop the water washing away the bank.

Photo 78: Dried grass used to form a mulch

Vetiver grass hedges help to: -

- Stop the soil rolling down the hill when you dig a garden on a steep slope.
- Stop heavy rain from washing the soil from the garden into the river.
- Produce leaves for mulching your garden or kunai for your house.
- Make a fence to mark the boundary of a garden or house yard.

2. What does integrated farming mean?

Integrated farming means growing a mixture of trees, food crops and animals on your farm where each part of the farm helps the other. For example, the animals produce animal manure which can be used to help your crops while the crops produce food for feeding your animals.

Teaching Notes

Education tip

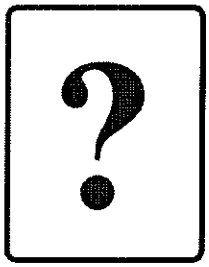
Getting quick results

Most adults do not have time to waste. They want to spend their time studying things that will help them now. They want to see results as soon as possible. Often when training courses do not produce quick results, it is hard to keep participants interested for the whole course. So make sure that each course and lesson you teach has some things that will give quick results which means that the participants can use what they are learning straight away.

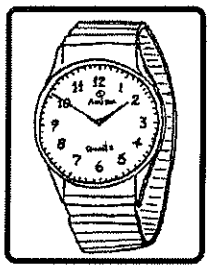
In the lesson about integrated farming you can take a few Yar trees with you to the training site and plant them in the gardens you are working in. Or you can make a compost heap together. When you go back for the follow-up workshop or for an extension visit you will be able to reinforce your teaching by pointing out the Yar tree you planted or the compost that has been made in the compost heap. These are quick results.

Photos

Lesson 15: Gender

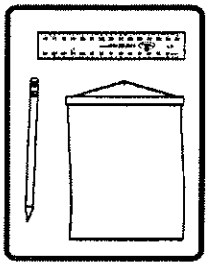


Goal and Purpose



Time

60 Minutes



Materials

White or black board

What to do?

Role-play

Prepare a role-play with some of the participants: in the role-play a man drags a woman by the hair through the village while swearing at her. The

Photos

Photos of the role-play

Teaching Notes

Education tip

Role playing

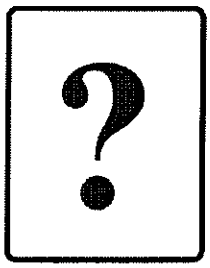
When people are asked to act in front of the group as if they were doing something that may happen in their lives, this is called role-playing. The leader tells the actors who they are and what they are supposed to be showing. The actors then try to show how they would act if this was happening to them.

Role-playing gives learners a chance to try out new ideas, skills and attitudes that they have been told about in the lesson/ workshop. This method helps the actor and those watching to understand more about the ideas, actions and feelings that are part of the lesson and to remember what has been taught.

We think it is good to use role-playing in the gender lesson. Role-playing helps the watchers and the actors to understand more about the feelings and thoughts of another person. Sometimes it is good to stop a role-play half way through so that the whole group, actors and watchers, can think about and discuss what has happened and how the problem could be made better. Role-playing can be a way of getting people to talk in a way that could not have taken place if the role-play had not happened.

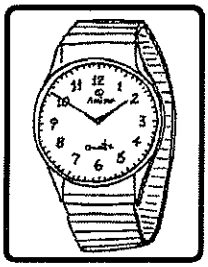
Photos

Lesson 16: Repetition, Test and checking how the course went



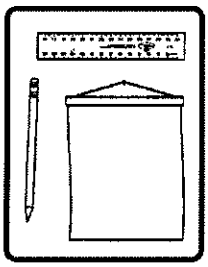
Purpose

To repeat what they have learned in the last 3 days and to test the knowledge gained by the participants.



Time

90 minutes



Materials

Repetition questions (see chapter 8.1.2)

Multiple-choice test paper (see chapter 8.2.2)

Evaluation form (see chapter 8.3)

What to do

1. Revision questions

Split the farmers into two groups. Each group selects a person to talk from their group. Ask the first group a question and give them a short time to talk between themselves and work out what they think the right answer is. The speaker then gives their answer. If the answer is right the group gets a point. If the answer is wrong, the second group gets the chance to answer the question and if their answer is right they receive the point instead. Then the second group gets a question and the same rules for answering are followed. At the end of the competition the group with most points is the winner. (See examples of questions in chapter 8.1.1.)

2. Test

Use the test in chapter 8.2.1 where a question is asked and a list of answers are given, only one of which is correct. The participants have to choose which answer is correct.

Explain how the participants should do the test and use the first question as an example to make sure they understand how to answer the questions.

Always ask the participants if they can read. If there are any participants who cannot read well enough take them aside and do the test with them by asking them the questions and getting them to tell you their answer.

Collect all the test papers and mark them. Hand the test paper with the mark back to the participants and go through the test paper with them, giving them the right answers. This is another way of repeating the information they have already heard in the lessons.

3. Checking how everyone thought the course went

This is when the course leaders and participants can look back on what they have done in the training course part 1 & 2 and find out how the participants felt about the course.

You can use the results from the check to help you improve your next training course. It is also a way for the participants to express their ideas and feelings about what they have learnt. By thanking them for their feedback and contribution you show that you respect them.

Let them know that they do not need to put their name on the check paper and that you think that what they have to say about the course is important.

See an example of a checking/evaluation form that could be used under chapter 8.3

Teaching Notes

Education tip

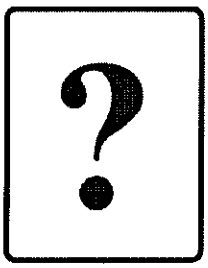
Praise

For praise to be useful it is better to praise well rather than very often. Here are some ideas for using praise in lessons:

- When you praise you must mean it because you think what you are praising is really good. It should be given when the activity you are praising happens rather than later. The way you praise people should not always be the same. Praising because you really think what has been done is good is the most important thing. (Example: If someone has worked very hard at making the duck shelter you could say "You have been very good in helping to build the duck shelter").
- Praise is best when it is based on one event rather than being general. (Example: Your answered the test very well. Most of you had only one or two mistakes.)
- Praise is very good when it praises something that someone has done because of his or her work, knowledge or skill. (Example: The way you have made the nest box is very good. It is the right size, it is strong and you have made it completely out of bush materials.)

Photos

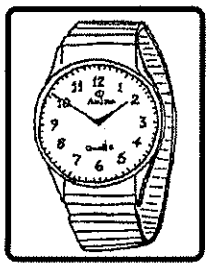
Lesson 17: Hand out of certificates and course closing



Purpose

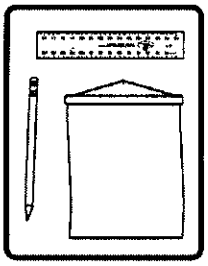
To hand out the certificates

Closing the training course



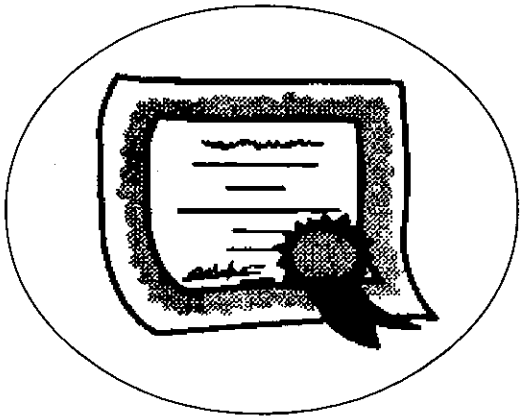
Time

30 minutes



Materials

Certificates



What to do?

Hand out the certificates. (An example of a certificate can be found under chapter 8.3)

Close the training course officially and let the participants know your feelings and that you are happy about what they have done.

Say again that the training course was only the start and that there is still a lot of hard work that the participants will have to do if they are to become successful duck farmers. Tell them that you think that they will be able to look after their new livestock well.

Tell them that you will come back to see how they have got on with looking after their ducks and that a follow-up workshop will be held about 9-12 months from now.

Teaching Notes

Education tip

Finishing the course well

Everything has a beginning and an end. If the end of a course is good the participants are more likely to remember and use what they have been taught and the participants are more likely to come to a similar course in the future. It will also help strengthen the group spirit between the participants and the instructors. The last benefit is important to us as we want to continue to work with the group in the future.

To finish the course well you could simply thank the participants for the way they worked during the course, or it could be a bigger event where certificates are given out in a small ceremony. Some ways to end the course well are as follow:

- Having a party. Everyone likes parties and participants can feel proud of what they have done as the others clap them for what they have done during the course.
- Telling participants they have done well. This can be a simple statement saying they have done well and you are happy with them or you can be more formal as you hand out certificates. The goal is to recognize anything the participants have done during the training course. The instructors or the participants or both can do this.

PART III

The Training Course Step-by-Step Follow up Training Course

Follow up Training Course Preparations

Follow up Training Course Schedule

6 The Training course Step by Step - Follow-up Training Muskovi Duck Training Course

The follow-up Muskovi duck training course should take place 9-12 months after the first course. Make sure that you visit the farmers at least once in between the courses to check up on how well they have looked after their ducks and how many eggs have been laid, how many ducklings have been hatched and to encourage them in their efforts to look after the ducks.

6.1 Follow-up Training Course Preparations

A couple of weeks before you run the course you must tell all the participants that you will be coming to take the follow-up training course. The people who came to the first course should come to this one, as well, because you will be giving them information they need to know if they want to be good duck farmers, so make sure you ask them to come.

The materials needed for the Muskovi duck follow-up training course are listed in the checklist in Chapter 10.3.

6.2 Follow-up Training Course Schedule

The follow-up training course takes two full days.

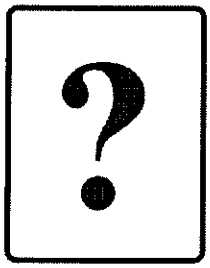
On the first day the course leader should look at each of the participant's Muskovi ducks, their duck houses, duck waterers, brooders and nest boxes and ask them how many eggs have been laid and how many ducklings have hatched out from the eggs.

On the second day, the participants meet together for the course and tell their "duck stories". The stories are written on a big chart. When all participants have told their duck stories the course leader and the participants try to see, by looking at the chart, the main problems the participants had.

Everyone talks about the main problems and tries to see what can be done to fix the problems.

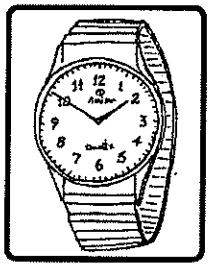
Time	First Day	Second Day
8.00 - 8.30	**Lesson 18** Talking to duck farmers; looking at the duck house, nest boxes, brooders and waterers and finding out how many eggs were laid by the ducks, how many hatched and how many were eaten by the farmer and his family	Devotion
8.30 - 10.00		**Lesson 19** Introduction to the second training course, welcome, roll call, and farmers telling their "duck stories"
10.00 - 10.30		Tea-break
10.30 - 12.00		**Lesson 20** Finding the problems the farmers had and trying to fix them.
12.00 - 13.00		Lunch
13.00 - 14.15		**Lesson 21** Going over the lessons already learnt
14.15 - 14.45		
14.45 - 16.00		

Lesson 18: Inspection of duck farms



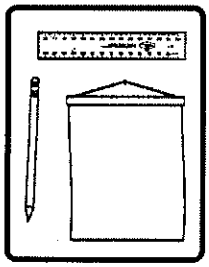
Purpose

To visit all the duck farmers and look at their duck shelters
To listen while the farmer tells how he has looked after his ducks
To check the health of the animals
To see how well the duck has laid and how many ducklings she has looked after well
To help the course leader to learn how well the farmers have been looking after their ducks
To help the course leader to decide what training is needed for the following day



Time

1 day



Materials

List of participants from the first duck-training course (first and second part)
Survey form for extension visit (see example in chapter 11.1)

What to do?

1. Visiting farmers

Visit all the participants' duck farms and fill out the extension visit survey form shown in chapter 11.1.
* Visit all the participants who took part in the first training course, even if all their ducks died, were sold or were eaten.
* For the farmers who no longer have any ducks, try to find out what happened to their ducks.
* Look at the duck shelter, see how healthy the ducks are and how many ducklings they have hatched.
* Fill out the questions on the survey form
* Weigh the grown-up ducks

Ask the farmer about the way he/she looks after the ducks. Ask what he/she does well and where he/she could improve.

Teaching notes

The information you get from visiting each farmer, the survey forms, collected stories and by looking will help you to make sure the lessons you use in your second training day will be most helpful to the farmers. Extra lessons may be needed on duck feeding, breeding, housing or other topics. Sometimes you just can repeat some of the lesson outlines used in the first training course.

Education tip

Finding out what farmers need help with

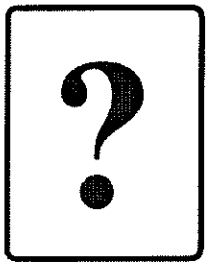
If farmers are to be able to do what we are teaching them we must first find out
* what they really need to learn so they can manage their ducks well
* if there is anything they are doing now that they should be doing a different way
* if they have everything they need to look after their ducks (enough people to do the work, the right skills to do it, enough good water, enough of the right kind of food to feed their ducks and ducklings, agreement from their village that they can keep the ducks, etc.)

To find out the answers to the above questions we need to look and listen carefully before we think we know the answers to our questions. This looking and listening is very important in adult learning. We always need to ask them. We need to watch them as they care for their ducks or other livestock. We should go to their homes, their livestock shelter and their gardens to look at what they are doing. We need to find out what they already know. All this listening and looking and using what we hear and see will help us to make sure we give the farmers what they need to know so they can look after their ducks very well. If you do all these things, the farmers will enjoy your course as they will feel they are not wasting their time because you are giving them what they need.

Finding out what to teach is very important for the follow-up training course.

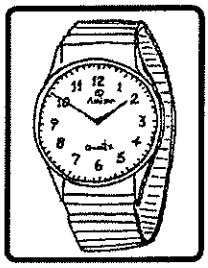
Photos

Lesson 19: Introduction to the follow-up training course



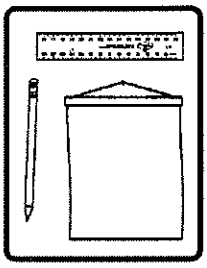
Purpose

* To get to know the farmers again and to help them to get to know you again
* To explain the aim and purpose of the follow-up training course



Time

* 1 hour



Materials

List of participants from first course

What to do?

1. Open the training course with a short devotion and prayer
Training courses are opened and closed with a prayer. The spiritual world and it is part of what PNG people believe and know.

2. Roll call
Use the list from the first course and find out how many of them are attending your follow-up training course.

3. Introducing yourself and the other course leaders
Make sure that you and other training course leaders are introduced properly again, if this is needed. Tell the participants something about yourself so they are more likely to trust you and feel happy with you. For example you can tell the participants:
* What you have been doing since you met them in the first course
* How you felt when you visited them on their farms yesterday
* Or tell them what you have liked about the community/participants since you arrived in the village.

4. The training course goals and programme
Write the follow-up training course goals on the white/black board or have them already written

on a stock feed bag (see 4.2.1.2). Use what you saw and heard yesterday to work out what the goals for this day should be. The goals for the training day could be:
* To discuss duck feeding
* To discuss duck breeding
* To discuss duck shelter maintenance
* To discuss the problems the duck farmers have had
* To try to talk about what the duck farmers can do to fix their problems

Write the programme and topics you think will meet the training course goals on the white board. Here is an example of what could be done on a follow-up training course day:

Time	Training day Topic
8.00 - 8.30	Devotion
8.30 - 10.00	**Lesson 19** Introduction to the follow-up training course, welcome, roll call, collection of duck stories from each farmer
10.00 - 10.30	Tea-break
10.30 - 12.00	**Lesson 20** Finding out what farmers need help with 12.00 - 13.00
12.00 - 13.00	Lunch
13.00 - 15.00	**Lesson 21** Lessons farmers need extra help with: Feeding, breeding and how to stop ducks eating their own eggs

Teaching notes

Education tip

Making sure that what you are teaching will help the participants to improve their lives and their farming

Men and women are happy when they feel that what they are learning will be of use to them and they can use it to improve the way they live. They need to be able to use what we teach them to improve the way they do things, to know what to do about the things they are worried about and to help them understand what they believe in better. Our teaching could help them with worries about how to look after their family (women), or their importance or level among the other men in the village (men). These problems that men and women often think and maybe talk about are important and we must not forget about them in our teaching.

When we are teaching men and women we must make sure that what we are teaching makes a difference to these problems that they have. We must remember that the course participants are not only duck farmers but are, more importantly, members of a village community, part of a family and that they are worried about improving the lives of themselves and their families, getting enough money for their needs and what their level and importance is, in the village.

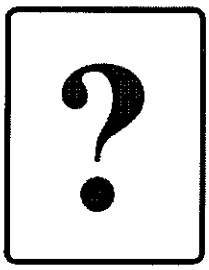
As a course leader, you must make sure you remember these things when you are teaching the participants and talking with them so you will be able to give them what they want to know.

As a course leader, however, you must be careful not to tell people how they should act or what they should believe. How they should act and what they should believe is their own business and they must work that out for themselves. If you try to tell them these things you may make them angry and unhappy and they will not listen to you. You can tell them how you would act, but not how they should act.

You should not talk about politics in you lessons as many people have very strong ideas about this and if you say something different from what they think, they can get very angry.

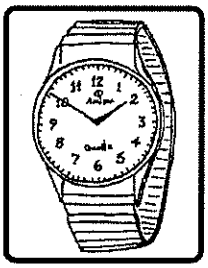
Photos

Lesson 20: Collecting "duck stories" from the participants



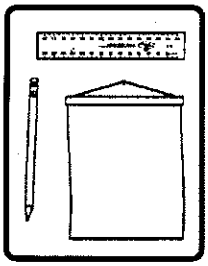
Purpose

To find out what happened to each participant's ducks after the first training course.



Time

90 minutes



Materials

Chart

What to do?

1. Find out what happened to the ducks after the first training course?

Ask each participant to come to the front and tell a "story" about what happened to his/her ducks. Use the list of questions below to help to get the stories from the participants:

1. How many breeding female Muskovi ducks do you look after?

2. How many breeding male Muskovi ducks do you look after?

3. How many young ducks are you looking after?

4. How many times did your breeding ducks sit on eggs?

5. How many eggs did they sit on?

6. How many ducklings hatched?

7. How many ducklings died?

8. Why did the ducklings die?

9. How many grown up ducks died?

10. Why did they die?

11. How many eggs did you eat?

12. How many eggs did you sell?

13. How many ducks did you kill for eating?

14. How many ducks or ducklings did you sell or give to relatives?

15. How many ducks or ducklings were stolen?

16. What kind of food and how much did you feed your ducks and ducklings?

Note all the stories/answers on a big chart in front of the group. Here is the chart we use:

Farmers/Question		1	2	3	4	5	6	7	8	9	10	Total
1	Number of female											
2	Number of male											
3	Number of ducklings/young											
4	# of hatching?											
5	# of eggs?											
6	# of ducklings hatched?											
7	# of ducklings died?											
8	Why did they die?											
9	# of grown up died											
10	Why did they die?											
11	# of eggs eaten?											
12	# of ducks eaten?											
13	# of ducks sold/wantoks?											
14	# of ducks stolen											

Teaching Notes

The chart will give you and the participants a good idea of what has happened to the ducks and how good or bad the various farmers are at looking after their ducks. With this chart and the information you got from visiting and talking with the individual farmers on the first day of this course, you should have a good idea of what has happened to the ducks since the first course.

Teaching Notes

Education tip

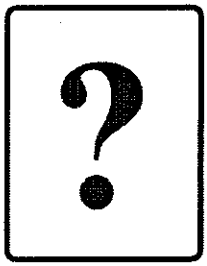
Active learning

Helping participants to take an active part in their learning is very important as this helps them to remember what they have been learning and makes it easier for them to use what they have learnt, later. When we teach participants we should let them take an active part in the lesson, rather than have them sitting and listening only. When participants are actively learning, working in small groups or in teams they do not want to stop when we ask them to make a break. They forget about themselves, about having tea breaks or even about their lunch. They are too excited and interested in what they are learning. When this happens, they are really learning. If it doesn't happen, people do not learn very much.

When participants pay a course fee you can know they are interested in what you are planning to teach them and they are likely to take an active part in their lessons. All successful lessons make sure participants take an active part in learning.

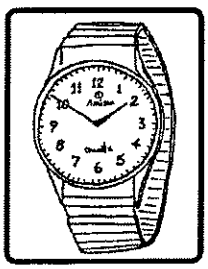
Photos

Lesson 21: Finding what problems the duck farmers have and working out what can be done to fix them



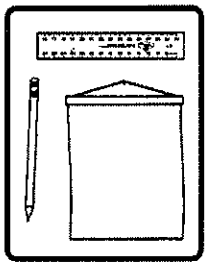
Purpose

To find out the main problems and difficulties duck farmers have
To look at ways of fixing these problems
To find out what help the farmers need



Time

60 minutes



Materials

White or black board

What to do?

1. Look at the chart and think about the problems it shows
Look at the chart together. Ask the participants to tell you the problems that make duck farming hard for them.

2. Talk about the main problems with breeding ducks
List the main problems and possible causes on a separate flip-chart or on the white/black board as shown in the example below. Each group you teach may have different problems. However the main problems we found in our follow-up courses were as follows:

Example table only, the groups you are teaching may have different problems from this list

Main problem	Possible causes	Possible solutions
Many eggs disappear	* Kids are stealing and eating the eggs	* Teach the kids about duck farming and why they should not steal the eggs (maybe punishing them as well)
	* Rats are eating the eggs (you will find the shell near by if this is happening)	* Set rat traps * Get a cat that will catch the rats * You need to protect the ducklings from the cat
	* Ducks are eating their eggs while they are sitting on them	* Give ducks enough food near the nest box twice a day
	* Snakes	* Cook some eggs and leave them where the snake will get them. If snakes eat a cooked egg they will die.
	* Ducks are eating their eggs after they lay them and before they start sitting on them	* Take her eggs away from the nest as soon as she lays them and keep them in a cool, safe place. Put the clay eggs you have made, in the nest to replace her eggs. Once the duck stops laying any more eggs and starts sitting properly on the clay eggs you can take them away and put her true eggs back in the nest for her to sit on and hatch.
Eggs turn black	* You have let a young duck sit on the first eggs she laid	* Eat the first eggs that a young duck lays as they are usually small and do not hatch well
	* The eggs the duck sits on are too small	* Feed the duck better so she will lay bigger eggs and do not let her sit on small eggs
	* You have not fed the ducks who are sitting on eggs enough food and therefore they leave the nest for too long to find food. The eggs get cold and the ducklings inside the eggs die.	* Make sure that ducks are given plenty of food near the nest box when they are sitting on the eggs. Putting the nest box in your house where you eat will help you to remember to give the duck food at the same time as you eat.

Main problem	Possible causes	Possible solutions
Not many ducklings hatch out of the eggs the mother duck is sitting on and many eggs do not hatch at all	* Duck is not given enough food nearby while she is sitting on the eggs. Therefore, she leaves the nest for a long time to find food and the eggs get cold. This causes the ducklings inside the eggs die.	* Give the mother enough food nearby so she does not have to leave the eggs for a long time. * Use a nest box with dry grass in it so that it is easier for the duck to keep the eggs warm
	* Eggs are too small and the ducklings inside the eggs are too weak.	* The mother duck needs plenty of food so she will lay big eggs
	* It is the first time the young mother duck has tried to sit on eggs	* Mother ducks usually get better at sitting on eggs as they get older
	* Male duck is not mating properly with the mother duck	* Make sure the male duck is fed enough so he can grow well (check his body weight) and mate properly
Many ducklings die after hatching	* Eggs were too small and the ducklings that hatch are small and weak	* Feed the duck better while she is laying so she will lay bigger eggs
	* Too cold for ducklings	* Keep the mother and ducklings in a brooder that is dry so it is easier for them to keep warm
	* Ducklings get wet and die because they are cold	* Use a good drinker so that the ducklings do not get wet
	* Ducklings are not fed properly	* Make sure you give the ducklings plenty of good food.
	* Ducklings are taken by enemies (pig, dog, tarangau, rat, snake)	* Keep the ducklings and their mother in a brooder with a fence where they are protected from their enemies
Female/male ducks are too small and light	* They have not been given enough good food	* Give the ducks more good food
	* The duck has worms in its intestine	* Give the ducks a medicine to kill the worms in their intestines (use

Main problem	Possible causes	Possible solutions
	* Duck is sick	* Put the sick duck in a separate pen and feed her well. You can try to give her antibiotics (amoxicillin 500mg, 1 tablet a day for 3-5 days) She if she recover. You will have to decide to eat her or try to treat her.
Ducks disappear	* Stealing * Dogs and pigs killing and eating the ducks	* Talk to the whole community/ clan to see if they can stop the problem

3. Try to find ways to fix the problems
Ask the participants what can they do about their main problems in looking after ducks.

Fill in the solution column on the flip chart (or use black or white board). It is important that the participants give the solutions to the problems they experience, not you. This is how participants take an active part in learning.

4. Talking again about the things already learnt that will help to fix the problems
Now is the time to again talk about some of the lessons you taught in the first course. Sometimes participants need to be reminded again of what they have been taught.
Make sure that you encourage the participants to continue with their efforts, even if they have not done very well. Nobody knows everything about how to look after ducks when they start. Successful duck farmers are people who keep trying, work hard and always try to learn as much as they can about the animal.

Teaching notes

Education tip

The Seven Steps of Planning

Use the seven simple steps of planning: Who, Why, When, Where, What, How and What For. The training course as set out in this book uses these seven steps and helps us to make a plan we can follow as we try to teach men and women about ducks.

* **Who:** Who are the learners? How many farmers will participate in the course? What is their background (culture, way of living, etc.)? What do they already know? What is their experience gender and age? What do you know about them?
* **Why:** Why is this training course happening? What situation/problem calls for this training course? Why do the participants want to be trained?
* **When:** When will this training course happen (weekend, week days, etc.)? How long will the training course be? Are the participants happy with the timing and length of course? Will everything be ready for the course?
* Where: Where will the training take place? What is there at the training place that you can use (class room, etc.)?
* **What:** What lessons will be in the course? What will be in the lessons?
* **How:** What kinds of the training method will you use? (Will you do all the talking; will you and the participants share the talking; will you use photos; will you get people to do things themselves rather than you doing everything for them; etc.?) What kind of skills will you use to run the course (listening skills, talking skills, practical skills)? What kind of materials will you use for the course?
* **What for:** What difference will the training course make to the participants? What new work will they be able to do after the course? What are the objectives of the training course? What should the participants know at the end of the course? How will you make sure the participants know what you have taught them?

Photos

PART IV

Lesson Plan Training Course - First Part

Devotions

Repetition Questions

Test Papers

Evaluation Form

Certificate

Helpful Information about muskovi duck farming

Tools kit and check lists for needed material

Other useful materials

7 Devotions

The devotions below will give you some ideas about subjects that you could talk about with your participants.
If there are pastors in the village where you are taking the course we think you should get them to help in the morning devotions. Ask them to be in charge of at least one morning devotion. However, if there are no pastors, or if your are a pastor, than the suggestions below could help you to get ready for the devotion at the beginning of each day.
Some of the devotional thoughts outlined below are taken from "Footsteps". Some of the devotions refer to "people who want to help others to make their lives better" or "Christian leaders". We believe that people taking part in these kinds of training courses want to make life better for others and themselves and are leaders in the community.

7.1 Devotion 1: God cares about you

God is interested in our spirits, our feelings inside and whether our body is sick or well. He is concerned about how we think and care about Him, how we think and care about others, how we think and care about the environment as well as how we think and care about ourselves.

Read Genesis 2,7 and 3,9: How strong is God's spirit in us
Genesis 2,7: God made us from the "dust of the ground'. Our body is empty if we do not have a spirit. God brings our spirits alive with His breath of life. When God removes His life giving breath from our bodies and we die, our bodies once again return to dust. Therefore our life and everything that is good about us comes from God's Spirit. The good things about us do not come from what we do but as a gift from God who chooses to give us life.
Genesis 3,9: In these verses God shows us that He wants to have fellowship with us. God made man to be his friend. God's first purpose for man was for man to know and love God. He loves us and wants us to love him. He made us so we can talk with Him and listen to Him, to praise Him, to glorify Him and to look after the earth with Him. Sin showed God that we no longer loved Him. We became spiritually dead to God. However, Jesus, God's Son, opened the way for us to be forgiven for our sins and again love Him. God want to give us His full love through Jesus. Accepting Jesus as Lord and Saviour means we become spiritually alive again. God want us to be alive, spiritually.

Read Genesis 2,18: Having good feelings inside
God made women so that men could have a friend to love and talk to and to help him to live. It was not good for men to be alone. Loneliness can drive us crazy. God saw how important it was that men and women have good feelings inside . God's work of making the earth and man was not finished until he made women so that men and women could help each other to have good feelings inside . We need our family and our community so that we can be happy and have good feelings inside ourselves and help others to feel the same.

Read Genesis 1, 28 & 29: What we need to make our bodies feel good

God gave the food that was in the Garden of Eden. Man was asked to take care of what God had made in His garden. God asked men and women to help Him look after the plants and animals on the earth. He wants us to care for the soil, air and water around us and all the animals and plants that live here with us. God was very careful how He made the earth and we must be careful how we take look after it for Him. He knew we would need food, water and shelter to be able to live and He provided plenty of these things for us. It is our job to use it without harming it.

Questions for discussion
* How do you know, in your daily life, that God cares about you?
* How could what you are learning in this training course show you that God loves and cares for you?
* Is this training course about our spiritual happiness, our feelings inside or how our bodies feel? (We believe the training course is about all three sections:
    * Spiritual happiness: Helped by devotions and fellowship with brothers and sisters in Christ
    * Feelings inside: Helped by fellowship with others, team work and experiencing friendship
    * How or body feels: Helped by learning about how we can improve our living and food)

7.2 Devotion 2: Placing God first

If our work in helping to improve the lives of others is to be successful, we need to place God first in every-things we do. However, owning things or trying to improve our level among other men in the village often takes first place in our lives in such a way that sometimes these become our god. Instead, we should make what is said in the book of Proverbs the rule for our actions. It suggests many rules which may help us to work better with God and others.

Read Proverbs 3:1-10
We need to trust in God with all our hearts and souls and not in other men or what we can do ourselves. In facing everything that happens to us, we must keep on believing, praying and doing what the Word of God says we should. Doing these things will help to keep us healthy and happy.

Read Proverbs 4:7-9
How useful our work is to others depends on how we use what we know to help others. If we use everything we know as we try to help others we are likely to do well in what we do at home, at work and in our community. What we know starts with what God has given us and includes what we know about modern science, geography or history, but more importantly includes a love of God and man.
Knowing and using all these things in God's way is called wisdom.

Read Proverbs 9:10-12
Wisdom is first of all about looking up to God as the One who knows everything about us. Many people put their families or their level in the community first, rather than putting God first. How well we do our work depends on how important God is to us as it is from Him that we get the knowledge and skills that we need to help others. Wisdom that comes from God makes us better at doing what He wants us to do.

Read Proverbs 16:3 and 9
These two verses tell us how to give God first place in our lives. He will show us what we should do to have success, even in the smallest things we do.
Our work is not of any use if God is not at the head of all our projects and if we do not place Him at the centre of our work. It is pointless to rise early and to work as long as we can unless we do it for God (Psalm 127:1-2).

Questions for discussion
* Who do you turn to first for help if you have trouble?
* How does your level in the community or what you do with your family change how well you do your work?

7.3 Devotion 3: Getting money

Read 2 Thessalonians 3:6-13
The apostle Paul was very worried by a report that some members of the church at Thessalonica were not doing any of the work they should have been doing. Instead they were worrying about other people's business (v 11) and, therefore, did not have enough for themselves to live. This made it hard for the rest of the community who had to give them the things they needed to live (1 Thess 4:2). So Paul said that these people should live in the same way that he did and the Thessalonians should work together so they could get enough money to live on (v 12). Let us look at what Paul did so we can live in the same way as him:

Although Paul, as a missionary, could have asked the churches he had started for money (v 9), he didn't do that but showed them how they should live by looking after himself by working hard. He and his friends worked' night and day' so they would not make it harder for the church members (1 Thess 2:9).

Paul made money by doing the work he knew how to do. He had learnt how to make tents for people to live in and did this job when he was in Corinth (Acts 18:3). We also need to know what we can do well and do that to get money.

Paul worked together with others who knew how to make tents. He did his work with Aquila and Priscilla (Acts 18:1-3, 2 Thess 3:9 'we worked night and day'). You as a duck farmer should work with other people who also look after ducks or livestock.

Paul used the money he got from his work to look after himself and his friend (Acts 20:34). He also worried about those who had no money or food. He asked the Ephesians to work so they could give help to those who did not have enough (Eph 4: 28). He helped the churches whose members were not Jews to be happy to give help to people in Jerusalem who were Jews but had very little to live on (Rom 15:26-27).

Therefore we, as God's people, are asked to work hard, doing the work we can do well to make money ourselves and as a group so that we can help ourselves and those who do not have enough, whether they are other Christian workers or not.

Working to make money or the things we need to be able to live is very important for our families. In the modern world it is easy to sometimes forget about our families as we work very hard to help others who have nothing. Mothers and fathers should give their children what they need (2 Cor 12:14), while children should help their mothers and fathers when they grow old (1 Tim 5:4).

It will be very hard for us to help our families, the church, our community or ourselves unless we learn how to save small amounts of what we get each week. If we do not do this, our hard work will be wasted. If Joseph had not stored up food in Egypt during the seven years when there was plenty of food, he and his family, both in Egypt and Canaan, would have died when there was a drought and no food (Genesis 41:33-57). If a community works together to save it is easy to be a community that has everything it needs. It is for this reason that we have, in many places, people who work together to put their money in a bank or a society which holds their money safe for them. The money the community has saved together is then used to help the whole community to be able to live better. If we work hard to make money and save some of it we can have a better life ourselves and also be able to help others.

Questions for discussion

* What are the things that I can do well? How can I use these things so that I have enough to look after myself?
* How can I help my own family and the other families in my community?
* Who are the people in the community who do not have the things that they need? How can I help them, and how can my community help them?
* How can we use our own money and the money our group has to be better at bringing the knowledge and understanding of God to others?

7.4 Devotion 4: Enough is as good as a feast

God's Word has much to teach us about food; how we get enough, whether we should put some aside for later, how good it is for us and why we should share it.

Read Psalm 65. This shows us how good God is at giving us everything we need. This Psalm talks about God giving us rain so that the crops will grow well and produce plenty of food for us to eat. Psalm 68,104 and 107 tell us the same story.

Joseph (Genesis 41) wisely stored food when there was plenty of rain so there would be enough food for the time when there was no rain. The writer of Ecclesiastes says five times that being able to eat good and tasty food is a gift from God. God gave wild birds (quail) to eat and other food (manna) to the Israelites in the desert. Read Exodus 16.

God does the same today as he gives us as much food as we need. It is easy to forget that the food that we grow or the money we earn to buy food comes from God. We may be tempted to store too much food. When we have too much food for ourselves we must be careful that we don't forget that it came from God and that we need to give some to the people near us who don't have enough. In the story of the Israelites (Deuteronomy 6 and 8) Moses warns the people with the words, "When you eat and have had enough, be careful not to forget the Lord your God". In the story of the rich fool (Luke 12) Jesus tell us that we must not get too much money or things and that we must not forget to help others.

It is good that in this training course we are thinking about making sure there is enough food, making sure we have the right kind of food and making sure we plan ahead. This work of having enough food for others and ourselves, in places like PNG where there is seldom too much food and where there is not enough food sometimes, is part of the work that God wants us to do.

Out of love for Him we must make sure our friends and relatives have enough so that they can give thanks to God, as well.

Questions for discussion

* From the story in Exodus chapter 16 discuss what we can learn about how the food God gave the Israelites became full of grubs and bad and could not be eaten if it was kept for a long time. What should we think about storing food that we do not need?
* Read 2 Corinthians 8:13-15. Think and talk about who has plenty of food in your community and who doesn't have enough food. Talk about how the food you and others have could be shared more evenly.
* Pray that God will make us try to help those who hardly have enough food to stay alive from day to day in our country and other countries.

7.5 Devotion 5: Making the community a better place to live in

Many Christian groups are worried about either the needs of people's spirits or the needs of people's bodies.

* What is the most important thing for us as Christians to be worried about?
* What can we learn from the Bible about this?

What were the most important worries for Jesus? Read Luke 4:18-20.
Here Jesus, for the first time, says why he came to the earth as a man. This was also written about in Isaiah 61:1-2, hundreds of years before the birth of Jesus. What are the reasons which Jesus gives for his coming?
Are they more to do with people's spiritual needs, or the needs of their bodies for food and drink - or both?

What should the most important worry for us be? Read Luke 10:27.
Christian leaders who work to make the community better must remember what Jesus said and did and try to do this too.
How should we love God? What does it mean to love the person living next to you or the person standing beside you in the same way that you love yourself? Are we truly worried about how well they are living, both whether their body is strong and healthy and if they are strong in their spirit? Jesus was worried about peoples' bodies as well as their souls. He made the sick better at the same time that he preached and taught. We too must be worried about peoples' bodies and souls. When Jesus sent out his twelve disciples to preach, teach and look after others, he told them that they must heal the sick and to be worried about how strong others were in their bodies, as well as preaching the Good News of Jesus Christ to them.

How should we do this? Read Matthew 28:19-20.
This is known as the 'Great Commission'. It is what Christians must do. It is an order from God! If we follow this order, all of us who are trying to improve the life for people in the community also need to share what we know and believe about God so that others will also get to know Him. We believe that working to try to improve the way people look after themselves and their community and to let more people know about the love of God are both important things for us to do. If we try to do only one of these jobs without doing the other at the same time, we will not be able to do either as well as if we do both together.

Questions for discussion
* What are the things that are most important to you?
* Think about how you could do what is most important to you in your family and community.

7.6 Devotion 6: Caring about what God has made

Be fruitful and multiply, and fill the skies and seas.' With this blessing in Genesis 1:22, God filled the sky, land, and sea with many different living things! 'You have made many things Oh Lord! In wisdom you have made them all; the earth is full of the living things you made'. (Psalm 104:24). Because of all the good things that God has made, all living things want to thank Him and say he is great. (Psalm 148).

Read John 3:16 and Psalm 104
How much does God care about the world he has created?

Read Genesis 6-9
What did God do when men started to do the wrong thing?

Later he promised eternal life to those who truly follow Jesus (John 3:16), but he warns of destruction to those who destroy the earth (Revelation 11:18).
God wants us to look after what he made.

Read Ezekiel 34:17-19
What does this passage show us about how we should treat what God has made? How should we think about the needs of other people and other living things?
Because God made all things and holds all things together through Jesus (Colossians 1:15-20), everything belongs to him. While God leads us to good food and pure water (Psalm 23), the earth belongs to God alone (Psalm 24:1). We do not own for ourselves alone what He has given us. We must share what he has given us with everyone and not try to keep it for ourselves for it is given for everyone and not just for us.
What are we doing to care for all the things living things that God has made? Are we too selfish, wanting everything for ourselves? (Matthew 6:33). Do we make sure that all the flowers, birds and other animals that used to live on our land can still live on our land or in our community? Do we make sure that all the different plants we and our fathers and mothers before us, use for our food and medicines keep growing? Making sure that our gardens are places where the living things God made can live and grow well is a good way of telling God that we are very happy with what he has done for us.

Questions for discussion:
* What are some of the things that we can do that will spoil our land?
* What can we do that will make sure we do not spoil our land?

8 Checking, Test, Evaluation Form and Certificate

8.1 Questions to see whether participants have learnt what has been taught

Questions to see if people remember what was taught in the first part of the training course (correct answers are in brackets)

* What kinds of ducks are there in PNG? (Rouen, Khaki Campbell, White Campbell, Muskovi)
* How many eggs should a female Muskovi duck lay in a year? (90)
* Give three reasons why Muskovi ducks are good for PNG villages? (Strong, good brooders, good at looking for their own food, do not need water to mate properly)
* Mention four good things you will get if you look after Muskovi ducks? (Eggs, meat, manure, money)
* Mention four things a duck farmer must do if he is to do well? (Feed ducks twice a day, give ducks enough water, keep the duck house clean, learn from other duck farmers, make sure someone will look after your ducks if you are going away for a few days)
* How many big ducks can you keep in your 2m x 2m shelter? (10)
* What are the 4 biggest problems that can harm your duck business? (Stealing of ducks, poor feeding, wet ducklings, ducks eating their eggs and male ducks killing the young ducklings)
* Mention 5 reasons why you need a duck shelter? (Keeps the ducks safe from their enemies (pigs, birds), the duck is not frightened when she is sitting on her eggs, protection from thieves, protection from hot sun, protection from wet and cold ground, easy to collect eggs in the morning)
* Why do sitting ducks need a nest box? Give two reasons. (Fewer eggs broken by other ducks, duck likes a dark, quite place to sit on her eggs)
* Why do you need a brooder? Give three reasons. (Keeps the young ducklings safe, they can be kept warm easily, easy to feed them good food and to look after them)

Questions to see if people remember what was taught in the second part of the training course

**** There is nothing here yet***

8.2 Test papers

Test paper for the first part of training course

Name: _____

1. What kind of duck is easy to look after in a village?
   a) Muskovi
   b) Khaki Campbell
   c) Rouen
   d) All ducks
2. Who in the family will have to look after the ducks?
   a) The man only
   b) The woman only
   c) The children only
   d) All the family, together
3. Write down four good things you will get from looking after ducks:
   1. _____
   2. _____
   3. _____
   4. _____

4. Write down four things you will need to do to make sure you will be a good duck farmer:
   1. _____
   2. _____
   3. _____
   4. _____

5. What are the things you must think about when you build a duck shelter?
   a) Water and food
   b) Food, shade, water, light, criminals, land ownership, pigs
   c) Light inside the shelter
   d) Criminals only
6. What are the biggest problems that can spoil your duck business?
   a) Stealing
   b) Poor feeding and ducks eating their own eggs
   c) Ducklings getting wet and dying because they are cold
   d) All are true, (stealing, poor feeding, ducklings get wet and are cold)
7. Why should you have a brooder for your breeding ducks and ducklings?
   a) To protect the breeding ducks and ducklings from snakes and rats
   b) To help the ducklings to grow fast
   c) To protect the mother, the eggs and the ducklings from other big ducks and to be able to feed them properly
   d) To be able to watch them growing
8. How many big ducks can you keep in the duck house that we built (2mX2m)?
   a) 2
   b) 5
   c) 10
   d) 20

Test paper second part of training course

Name: _____

1. How do you know if a Muskovi duck is a male?
   a) It's feathers are bent at the tail
   b) It has a red face
   c) It has red legs
   d) It has a red face, long legs and is bigger than female ducks
2. How often should you give clean water to the ducks?
   a) Each day
   b) Each week
   c) When the duck are making a noise
   d) When the ducks are ready to lay eggs
3. What kind of food do you give young ducklings (0-6 weeks old)?
   a) Sweet potato only
   b) Fresh fish or tin fish
   c) Corn and greens
   d) Balanced foods such as greens, corn, beans and if possible, stock food
4. What kind of food can you give to the ducks to stop them from eating their own eggs?
   a) Grease and oil from the store
   b) Potato skin and salt
   c) The broken shells from eggs you have cooked and eaten
   d) Nescafe
5. How many months old will a female duck be before she starts to lay eggs?
   a) 1 month
   b) 3 months
   c) 9-12 months
   d) 15 months
6. Where should you put the brooder?
   a) Into your house where you cook and eat
   b) Into your toilet house
   c) Into your garden house
   d) Into your duck house
7. What should healthy eggs look like when the female duck is sitting on them?
   a) They are blue or have blue spots or streaks
   b) They are white and shiny
   c) They are yellow
   d) They are dirty and have black spots
8. Why should you have a brooder for the breeding ducks and the young ducklings?
   a) To protect the breeding ducks and ducklings from snakes and rats
   b) To help the ducklings to grow fast
   c) To protect the mother, the eggs and ducklings from other big ducks and to be able to feed them properly
   d) To be able to watch them growing
9. When should you put the nest box in the brooder?
   a) When all the ducklings have hatched
   b) When the duck is sitting on the eggs
   c) Before the duck starts sitting on the eggs
   d) When the nest box is empty

8.3 Evaluation Form

Write down three things that you liked during this training course.

1. .....

.....

2. .....

.....

3. .....

.....

Write down one thing that you did not like in the course

1. .....

.....

D. What would you try to do better in this training course if you became the instructor?

.....

The Salvation Army
Training Duck Farming

Certificate

This is to certify that_____has successfully

completed the training course in Duck farming in Oiyana,

29th July to the 2nd of Ausgust 2002.

Dispela pepa i tok olsem,_____em i bin trenim

na kamap gutpela tisa long lukautim pato.

Trening i bin kamap long Oiyana long de 29 long 7 mun igo long de 2

long mun namba 8 long yia 2002.

John Hagen	**Anis Libaba**	**Janet Nehaya**
Program Assistant	*Teacher*	*Teacher*

9 Helpful information about Muskovi duck farming and other things mentioned in the manual

9.1 Addresses

The Salvation Army Agricultural Development Program, P.M.B. 3, Kainantu,
Phone/Fax: (675) 737 1274, Email: salvo@datec.com.pg

The Salvation Army PNG Social Services, P.O. Box 1323, Boroko N.C.D.,
Phone: 321 6000 or 325 5522, Fax: 321 6008 or 325 3534

The Salvation Army HIV/AIDS Program, P.O. Box 1323, Boroko N.C.D.,
Phone: 321 6000 or 325 5522, Fax: 321 6008 or 325 3534

National Agricultural Research Institute, Headquarters, P.O. Box 4415, Lae 411,
Phone: 472 1751, Fax: 472 2242, Email: nari@datec.net.pg

National Agricultural Research Institute, Livestock Research Programme Labu, P.O. Box 1639, Lae 411, Phone: 475 1066, Fax: 475 1248, Email: pikah@global.net.pg

Lutheran Development Services, P.O. Box 291, Lae 411,
Phone: 472 1122, Fax: 472 1638, Email:

DAL ERAP Research Development Center, P.O. Box 1984, Lae 411,
Phone: 474 9333, Fax: Email:

DAL Publication Department,

Liklik Book Information Centre Lae,

National AIDS Council Secretary (NACS),

9.2 Useful websites in PNG

AESOP ... http://www.aesop.org.au
AT projects ... http://www.global.net.pg/atprojects
ACIL ... http://www.acil.com.au
BESO ... http://www.beso.org
Conservation Melanesia ... http://www.ngo.org.pg/conmel
Eco-Foresty Forum ... http://www.ecoforestry.org.pg
ICRAF ... http://www.ngo.org.pg/icraf/
NANGO ... http://www.ngo.org.pg/nango
NRI ... http://www.nri.org.pg/
Partners with Melanesians ... http://www.ngo.org.pg/pwm
PNG Trust ... http://accu.topica.ne.jp/literacy/pngtrust/j.htm
POM City Mission ... http://www.ngo.org.pg/pmcm/
Timber and Forestry Training College ... http://www.tftc.org
Village Development Trust ... http://www.global.net.pg/vdt/

Volunteer Service Abroad ... http://www.vsa.org.nz
World Vision PNG ... http://www.global.net.pg/wvision/
VSO ... http://www.vso.org.uk
UNDP Papua New Guinea ... http://www.undp.org.pg
Papua new Guinea University of Technology Lae: www.unitech.ac.pg

9.3 Literature

Amaranth to Zai Holes, Ideas for growing food under difficult conditions,

Bostid, Microlivestock: Little-Known Small Animals with a Promising Economic Future, Chapter: 9 Muskovi,

Footsteps Newsletter, Tearfund, P.O. box 200, Bridgenorth, Shropshire, WV16 4WQ, UK, Email: footsteps@tearfund.org

Raising Ducks 1: How to begin, Better Farming Series 39, FAO

Tietze, Reinhard, 1989, Lukautim Pato, yangpela didiman, Lutheran Development Services, Published and printed by Kristen Pres, P.O. Box 712, Madang, PNG. (We purchased the book at the Christian Bookstore in Lae)

Vella Jane, 1994, Learning to listen, learning to teach: the power of dialogue in educating adults, Jossey-Bass Inc, Publisher, 350 Sansome Street, San Francisco, California 94194

Wlodkowski R.J., 1999, Enhancing adult motivation to learn, A comprehensive guide for teaching all adults, Jossey-Bass Inc, Publisher, 350 Sansome Street, San Francisco, California 94194

10 Check lists and tool kit for needed materials

10.1 Tool kit

The best toolkit for the workshops has:

Carpentry tools
* 5 hammers
* 3 pairs of pliers
* 2 pairs of tin snips
* 3 saws
* 2 bush knives
* Enough nails to build a sample duck shelter, brooder and nest box

Teaching tools
* Black board or white board
* Butchers paper
* White board markers and permanent markers
* Livestock for demonstrations
* Photos, drawings
* Prepared course training schedule
* Prepared course rules
* Note books
* Trainer's manual
* Personal teaching notes

Other helpful tools
* 6 knives to slaughter ducks

10.2 Check list of material needed for 20 participants for the first training course, part 1

Course leaders teaching material
* Black board or white board
* Chalk or white board markers
* Butcher's paper
* Permanent markers
* Training course schedule
* Training course rules
* Knives to kill the ducks
* 20 Name tags
* List of participants
* 20 Test papers
* 20 certificates
* Camera
* If necessary, a tarpaulin to build a temporary classroom

Materials needed for Participants
* Carpentry tool kit from 5.1.1
* 20 Notebooks or exercise books
* 20 Pens or pencils
* 20 Booklets "Lukautim Pato"
* 20 packs of nails for building the duck shelter. Each pack should contain: 25 x 4 inch nails, 30 x 3 inch nails and 30 x 2 inch nails.
* 20 packs of nails for the brooder and the nest box. Each pack should contain: 30 x 3 inch nails, 30 x 2 inch nails, 50 x 1 inch nails
* 4 tyre strips for the door hinges
* 20 lengths of chicken wire mesh (60cm X 400cm)

Food contributed for course participants lunch
* 4 kg rice per day
* 4 packets of noodles
* 2 tin fish (500gr) or 2 tin meat (500gr.)
* 100 tea bags for 1 week
* 1kg sugar per day
* 1 packet of powder milk (250gr)
* 2kg self raising flour per day to make fried scones
* 1 liter oil per day
* Salt, Soya sauce
* If necessary, Pans, cooking tools (knives), plates, cups and spoons

(Food for leaders, breakfasts and dinners is not included in this list and they must provide them separately)

Course leaders personal luggage
* Pack bag
* Sleeping bag
* Pillow
* Soap
* Toilet paper
* Changes of clothes
* Torch
* Coleman Kerosene lamp with spare mantel and generator
* Kerosene

10.3 Check list of material needed for 20 participants for first training course part 2

Course leaders teaching material
* Black board or white board
* Chalk or white board marker
* Butcher's paper
* Permanent marker
* Training course schedule
* Training course rules
* 20 Name tags

* List of participants
* 20 Test papers copied
* 20 Evaluation papers copied
* 20 Certificates
* Camera
* If necessary, tarpaulin to build temporary classroom

Material for Participants
* 40 female ducks and 20 male ducks
* 20 plastic bags with 1kg of stock feed
* HIV/AIDS information material

Food contributed for course participants lunch
* 4 kg of rice per day (if lunch is provided)
* 4 packets of noodles
* 2 x 500 gr tinned fish or 2 x 500 gr tinned meat
* 100 tea bags for 1 week
* 1kg sugar per day
* 1 packet of powder milk (250gr)
* 2kg self raising flour per day for scones
* 1 liter oil per day
* Salt, Soya sauce
* If necessary, pans, cooking tools (knives), plates, cups and spoons

(Food for leaders, breakfasts and dinners is not included in this list and they must provide them separately)

Course leaders personal luggage
* Pack bag
* Sleeping bag
* Pillow
* Soap
* Toilet paper
* Changes of clothes
* Torch
* Coleman Kerosene lamp with spare mantle and generator
* Kerosene

10.4 Materials check list for follow-up training course

Course leader's teaching material
* Black board or white board
* Chalk or white board marker
* Butcher's paper for duck story chart
* Permanent marker
* Training course schedule
* List of participants
* Camera
* If necessary, tarpaulin to build a temporary classroom

Materials for Participants
* Some female and male ducks for sale
* Some stock food for sale

Food for course (lunch for only 1 day)
* 4 kg of rice
* 4 packets of noodles
* 2 tin fish (500gr) or 2 tin meat (500gr.)
* Tea bags and sugar for 1 tea break
* Salt, Soya sauce
* If necessary, pans, cooking tools (knives), plates, cups and spoons

Course leader's personal luggage
* Pack bag
* Sleeping bag
* Pillow
* Soap
* Toilet paper
* Change of clothes
* Torch
* Coleman Kerosene lamp with spare mantel and generator
* Kerosene

11 Other useful materials

11.1 Survey form for extension visit before the follow-up training course

Duck Farmer Survey / Name: _____ Village: _____

1. How many ducks is the farmer looking after?
* Large Females: _____
* Large Males: _____
* Young ducklings: _____

2. Weight of breeding females and males?
* Female 1: _____ Male 1: _____
* Female 2: _____ Male 2: _____
* Female 3: _____ Male 3: _____

3. How good are the ducks?

4. How good is the duck shed?

☐ Very clean and tidy

☐ Clean and tidy

☐ Dirty and untidy

Other comments:

5. Does the farmer allow the grown up ducks out of the duck house?

☐ Very often (morning to evening)

☐ Sometimes (2-4 hours a day)

☐ Seldom (less than 2 hours a day)

Other comments:

6. Finish the table about the food you saw in the duck house?

	Lots of food	Little food	No food	Greens only	Kaukau sugar	Water
House 1						
House 2						

7. Farmers problems and comments

11.2 HIV/Aids leaflet and background information

Test Answers

Correct results test paper 1st part:
1) a, 2) d, 3) see chapter 4.3.3, 4) see chapter 4.3.3, 5) b, 6) d, 7) c, 8) c.

Correct results test paper 2nd part:
1) d, 2) a, 3) d, 4) c, 5) c, 6) a, 7) b, 8) c, 9) b.