

Food and Agriculture Organization of the United Nations

# SWMSUSTANABLE <br> WILDLIFE <br> MANAGEMENT <br> PROGRAMME <br> Ec© Players 

Keeping the Rupununi wild through games


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## SUSTAINABLE WILDLIFE MANAGEMENT (SWM) PROGRAMME

Millions of people depend on wild meat for food and income. Wild meat is an important source of protein, fat and micronutrients, particularly for indigenous peoples and rural communities in tropical and subtropical regions of Latin America, Africa and Asia. The demand for wild meat is growing, especially in urban areas. If hunting for wild meat is not managed at sustainable levels, then wildlife populations will decline and rural communities will suffer increased food insecurity. Recent studies have shown that overhunting for food is now threatening hundreds of wildlife species with extinction.

Between 2018 and 2024, the Sustainable Wildlife Management (SWM) Programme will improve the conservation and sustainable use of wildlife in forest, savannah and wetland environments. Field projects are being implemented in 15 countries and aim to:

- improve how wildlife hunting is regulated;
- increase supply of sustainably produced meat products and farmed fish;
- strengthen the management capacities of indigenous and rural communities;
- reduce demand for wild meat, particularly in towns and cities.

The SWM Programme is an Organisation of African, Caribbean and Pacific States (OACPS) initiative, which is being funded by the European Union with co-funding from the French Facility for Global Environment and the French Development Agency.

For further information: www.swm-programme.info

## Objectives of the SWM Programme in Guyana

The SWM Programme in Guyana seeks to ensure that the Rupununi can continue to offer sustainable options for food security and livelihoods in accordance with its traditional way of life while maintaining healthy wildlife populations through fostered coordinated community-driven initiatives that support food security and traditional livelihoods while contributing to maintaining fish and terrestrial wildlife populations. The project aims to achieve the following outcomes:

- Fish and terrestrial wildlife are managed sustainably.
- Livelihoods are enhanced by activities that support sustainable wildlife management.
- Critical stakeholders involved in wildlife are well trained for sustainable management.
- The knowledge required to make informed decisions for sustainable wildlife management is available.

To achieve those outcomes, the project will be articulated based on the following six result areas:

1. Legal and institutional aspects
2. Sustainable use models for inland fisheries and wildlife
3. Sustainable livelihoods
4. Wildlife consumption
5. Monitoring
6. Knowledge generation

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## Forevord

Education is the most powerful and dominant influence we can use to change the world. We need to educate ourselves about the importance of environmental education in order to make the world a better place in which to live. Being educated about the environment can help us utilize our resources more efficiently, and avoid harming our environment as well.

One of the ways in which we can learn more about our environment is by participating in practical activities such as games. Educational games can give us new meaning, to explore Mother Nature in a fun and interactive way. They can also teach us how to conserve and protect the environment. Games can also help us to explore and learn new, innovative techniques that will help us understand conservation more easily.

This book has been created with the support of the SWM Programme in Guyana, to help children in the Rupununi learn about the importance of their local wildlife and how to protect it through fun and interactive games. The games have been designed and adapted to include local species, making the messages of each game more pertinent for children.

Also, this book does not have an age limit! As the wise adage goes, "you are never too old to learn," and in the Rupununi I believe that all of us could use a fun reminder about the importance of our wildlife and why we must preserve it.


Oswin David

Country Coordinator Sustainable Wildlife Management

Programme in Guyana


## Introduction

This activity booklet includes 15 educational wildlife management games adapted for the Rupununi. It is intended for facilitators (e.g. teachers, wildlife club coordinators, wildlife managers, rangers) working with children (aged eight and above) and adults, to raise awareness of several key aspects of wildlife management.

The topics covered in this booklet include: the importance of not overharvesting, preserving habitats for wildlife, the consequences of unequal distribution of resources among communities, the interconnection between animals and plants, sustainable and unsustainable ways of sourcing food, and gathering information first to make informed decisions. Finally, a 30-day activity is included at the end as an eco-friendly challenge.

For each of the games, we describe the objective and the target audience, and provide guidance on how to play the games (number of participants, materials needed, setting, rules of the game). Some games are intended to be played outdoors while others have been designed as table games.

We hope that these games can be used as part of school activities, or by wildlife clubs, or perhaps during the Turtle Festival and other wildlife-related events in the Rupununi.

## Wildlife activities

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Materials checklist Total contents of hox

| Picture | Name | Details | Quantity | Check |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Small scissors | Small scissors | 6 |  |

# Materials checklist Total contents of hox 

| Picture | Name | Details | Quantity | Check |
| :--- | :---: | :---: | :---: | :---: |
|  | Danger cards <br> (laminated) | 5 pre-made <br> danger cards | 2 sets |  |

## Wiillifie activity \#1

## Turtitherach



Aim: To teach participants about the importance of not overharvesting turtles.


Number of participants:
15 to 20.
$\therefore$ Age group:
Ten years and above.

## Setup

1. Create three "beaches" by placing the three lengths of rope in three circles placed at least 10 m apart.
2. Place all of the game counters randomly around the activity area but do not put the game counters inside the "beaches".
3. Ask each of the three adults to stand in one of the beaches. These adults will be the "rangers" who are protecting the beaches.

## Instructions

1. Select one volunteer from the group of participants. If it is a big group of participants (16 or more), then select two volunteers.

## Materials needed:

- 20 game counters for each participant which will be the "turtle food". If no game counters are available then use anything as a substitute (e.g. cotton balls, bottle caps).
- Three lengths of 10 m rope.
- Cloth strips to use as turtle tails.

2. Inform the two volunteers that they are "turtle hunters" and the rest of the participants are "turtles".
3. Give all of the "turtles" a piece of cloth (their "tail") to hang out of their pocket or out of the back of their pants. The material must be visible and long enough for someone to be able to grab it.
4. Round one: Tell all of the turtles that they have to collect five game counters (pieces of turtle food) and, once they have done so, they have to run to one of the beaches.
5. Once they get to the beach they have to show the ranger their game counters. The ranger must check that each participant has five game counters. If they have five game counters, then they are "safe".
6. Inform the hunters that their role is to steal as many tails as possible from the turtles. A hunter cannot steal a turtle's tail once the turtle is standing inside a beach, where they are safe. If a turtle's tail is stolen, that turtle becomes a hunter and must also start to steal as many turtle tails as possible.
7. Round one will finish when participants are either standing in one of the beaches with their five game counters or they have become hunters because their tails have been stolen.
8. At the end of the round, ask all who are still turtles to raise their hands, and then do the same for the hunters. Highlight to the participants that the turtle population has now decreased.
9. Instruct everyone to randomly spread the game counters across the playing field except for in the beaches.
10. Round two: This time instruct the turtles that they need to pick up ten game counters before they can go to the beach. The rangers must once again check the number of game counters. The hunters will continue to steal tails until the turtles are either safe or have become hunters.
11. At the end of Round two, ask the turtles and then the hunters to raise their hands to show who now belongs to which group. Once again stress that the turtle population has decreased.
12. Before starting Round three, instruct each of the females who are still turtles to select one of the hunters to change back to a turtle by giving them back their tail. Tell the participants that this happened because it is hatching season and the females have given birth to new turtles.
13. Continue to complete rounds. In each round, increase the number of game counters the turtles need to collect. In every second round, instruct the female turtles to choose a hunter to change back into a turtle.
14. The game will finish once all of the turtles have had their tails stolen and everyone has become a hunter.

## Teaching points

- If too many people hunt turtles, they will become "overharvested" and their population will decrease.
- Protecting some beaches is important for turtle conservation.
- It is important not to harvest the females as they are the ones who reproduce and create more turtles.
- This promotes a culture in which maintaining the cultural tradition of eating turtle once in a while is more important than trying to catch as many turtles as possible for food or trade while seeing the turtle population disappear.



Aim: To teach participants about not overusing seine nets to catch fish.
\# Number of participants: 15 or more.

## Age group:

No age limit.

## Materials needed:

- Two lengths of 20 m rope.
- 15 or more labels/lanyards.
- Pen.
- Paper.


## Setup

1. Make a river by placing the two lengths of rope opposite each other in a straight line with a distance of 20 m between the two sides.
2. Tell all participants to stand behind the starting line.

## Instructions

1. Round one: Ask for one volunteer who will start as the "seine".
2. Tell the other participants that they are all "fish". Ask each of them to tell everyone what type of fish they are (tiger fish, mangi, arapaima, etc.). Each person needs to be a different fish.
3. Give each participant a label/lanyard and get them to write their fish down and wear it.
4. Inform the students that when you shout "go", their aim is to run down the river until they get to the other end and then run back. Once they return to the start they are "safe".
5. The role of the person who is the "seine" is to catch the fish. If the seine touches a fish, then that fish will also become part of the seine and he/she must also catch fish. All of the seines have to hold hands at all times.
6. Start Round one by shouting "go" and have the participants run up and down the river. All those children who are tagged must hold hands and join the seine.
7. After three rounds, make the river narrower. Tell the participants that it is now "dry season" and that is why the river is reduced in size. It will now be easier for the seines to catch the fish.
8. As the rounds proceed, continue to make the river narrower.
9. The game will end when all of the fish have been caught.
10. Round two: Ask for one volunteer to be the "hook and line".
11. Repeat the same game as before. However, this time the participant who is the "hook and line" is only allowed to move around on his/her knees.
12. When the "hook and line" tags a fish, that fish also becomes a "hook and line" and must also go on his/her knees. They do not need to link hands. They also need to move on their knees.
13. As the rounds proceed, continue to make the river narrower as before. The game will end when all of the fish have been caught. This should only happen when the river is VERY narrow as it will be hard for the ones on their knees to tag those who can run on foot.

## Teaching points

- It is not wrong to use a seine, but if too many people use it and do it too often, then we will overharvest the fish and there will be none left.
- We should use less intensive fishing methods such as hook and line to catch fish instead of seine.


Aim: To teach participants about the importance of preserving habitats for wildlife.

Number of participants:
Five or more.

## Age group:

Ten years and above.

## Materials needed:

- Solar torch.
- Eight large pieces of cloth (black).
- Two lengths of 20 m rope.


## Setup

1. Select an area of land that has lots of trees, bush and tall grass to hide behind, to use as the activity field.

## OR

2. Select an open field with no trees or bush.

## Instructions

1. Ask for one volunteer who will be the "predator". All of the other participants will be "prey".
2. The prey will go to one end of the activity field while the predator will remain at the opposite end - about 80 m away.
3. The prey must try and sneak all the way up the activity field using the trees, bush and grass as cover. Their aim is to get past
the finish line, which is directly behind the predator. If the game is being played in an open field, have some students hold up cloth around the field for the other students to hide behind.
4. When the predator hears a noise that he/ she thinks is prey, he/she must shine the torch in that direction. If they shine the torch and it reveals a prey, the predators must shout out their name.
5. If the predator successfully shines on the prey and correctly identifies it, the prey is "dead" and out of the game.
6. The predator cannot leave the torch on. The predator also cannot "sweep" the torch light. Predators can only shine in one direction when they hear a noise and if unsuccessful, must turn the torch off.
7. Predators can shine the torch as many times as possible, so long as they do not "sweep" the torch light.
8. The participants have a time limit of five minutes to make it to the end. If they do not make it in that time then they lose the game.
9. If played in an open field, the game can be played again but with fewer people holding cloth. This will teach the participants about the importance of having habitat to take shelter in.

## Teaching points

- Wildlife need plants (trees, bush, long grass, etc.) to be able to move through the savannah sheltered from the sun and predators.
- If we destroy all of the plants, it will be harder for wildlife to move around and they will be more vulnerable.
- We must therefore be careful when engaging in activities that destroy habitats for wildlife, e.g. burning, clearing land for farming or housing, making roads.


## Wiillifie activity \#4

## Flyig fish




Aim: To teach participants about the problem of overfishing.

Number of participants: Eight or more.

## Age group:

Ten years and above.

## Materials needed:

- Three game counters per participant. If no games counters are available then use anything as a substitute (e.g. cotton balls, bottle caps).
- Two lengths of 10 m rope.


## Setup

1. Set up two medium-sized circles at a distance of 20 m apart.
2. Place all of the game counters directly between the two circles.
3. Split the participants into two equal teams and have each team stand in one of the circles.

## Instructions

1. Inform one team that they are the "fish" and the other team that they are the "fishermen/women".
2. For the fish team, the game counters represent their spawn or baby fish. For the fishermen/women, the game counters are fish.
3. When the instructor shouts "go", both sides must run to the middle and collect one counter and return it to their circle. Each counter returned for the fish team is a newborn fish and each fish returned for the fishermen/women team is a fish that they have caught with hook and line.
4. Once all of the game counters from the middle are gone, each team must run to the opposite team's circle and begin stealing the game counters, which they must then return to their own circle.
5. Each person is only allowed to carry one counter at a time, and must place it in his/her own circle before collecting another counter.
6. After a few minutes, tell half of the participants on the fishermen/women team that they are now fishing with seine and can carry two game counters at a time.
7. After a few more minutes, tell the other half of the participants on the fishermen/women team that they are now fishing with poison and can carry three game counters at a time.
8. The game will end when the fish have no game counters left in their circle.

## Teaching points

- If we use fishing methods that are too destructive, we will use up all of the fish and there will be none left.
- We have to give the fish time to spawn and allow more fish to be born to keep their population healthy.


## Wiillilife activity \#5




Aim: To teach participants about the unequal distribution of resources among communities.
\# Number of participants:
Three groups of four to six people.

## Age group:

14 years and above.
Materials needed:

- Paper.
- Four large rulers.
- Two small rulers.
- Six pairs of scissors.
- Ten pencils.


## Setup

1. Split the participants into three equal groups.
2. Give Team One, two large rulers, one pair of scissors, five pieces of paper and one pencil. Give Team Two one large ruler, five pieces of paper and one pencil. Give Team Three, five pieces of paper, one pair of scissors, one small ruler and one pencil. Do not tell the participants that you have given them different amounts of materials.

## Instructions

1. Inform the three groups that the aim of the game is to make as much money as possible.
2. The groups make money by cutting paper into various shapes that are worth different amounts of money.
a. A square with equal sides of 5 cm is worth GYD 100.
b. A triangle with equal sides of 4 cm is worth GYD 200.
c. A pentagon with equal sides of 6 cm is worth GYD 500.
d. An octagon with equal sides of 5 cm is worth GYD 1000.
3. When the game starts, the groups have to work with their teammates to use their resources to make as much money as possible within the time limit of the game.
4. When team members make a shape, they can go to the "shop owner" (the instructor) who will buy their shape. The shop owner must check that the dimensions of that shape are accurate and only then can they award them the money.
5. The shop owner will record how much money a team has in a book.
6. Each team can also buy more materials.
a. A piece of paper is worth GYD 500.
b. A pencil is worth GYD 1000 .
c. A ruler is worth GYD 2000.
d. A pair of scissors is worth GYD 3000.
7. If a team purchases an item, the shop owner must deduct the amount from that team's total.
8. The instructor will inform the team that they are allowed to negotiate with other teams to borrow, rent or buy materials from them.
9. The instructor will advise the teams that they should give each person in their team a role (e.g. the leader, the seller, the negotiator, the drawer, the cutter).
10. After a set period of time (e.g. 20 minutes), the instructor calls an end to the game.
11. The team with the most money at the end of the game is the winner.
12. The winning team should be the team that started the game with the most materials.
13. The instructor can now reveal that each team received different amounts of resources. The instructor can then explain that this reflects that our communities have different levels of resources and some have more than others. Some may have access to the forest or to the river, and therefore have many resources, while others do not.
14. The instructor must emphasize the importance of sharing resources and being considerate of other communities.

## Teaching point

- Each community has different levels of resources and some communities have fewer than others.


## Wiillilife activity \#o




Aim: To teach participants about the consequences of habitat destruction.

Number of participants:
15 or more.


Age group: Ten years and above.

## Materials needed:

- One coloured cloth for each participant (Note: if coloured cloth is not available, then use coloured markers to colour paper).
- Seven $\times$ green.
- Seven $\times$ blue.
- Seven $\times$ yellow.
- Four game counters each. If no games counters are available then use anything as a substitute (e.g. cotton balls, bottle caps).
- Labels/lanyards.
- Pen.
- Paper.


## Setup

1. Choose a central playing area and then randomly scatter the game counters outside that area.
2. Assign the different types of habitats of the three different cloths as blue water, green - forest/bush and yellow - savannah.

## Instructions

1. Ask each participant to pick an animal that one would find in the Rupununi, e.g. jaguar, tapir, arapaima, harpy eagle.
2. Give each student a name tag with the name of his/her animal.
3. Give each student a piece of coloured cloth to indicate where their animal could be found, e.g. arapaima - blue (water), giant anteater - yellow (savannah). Some animals can be found in more than one, but only give them one.
4. Ask the students to spread out around the central playing area and stand on their pieces of cloth.
5. When the instructor says "go", the participants must run and collect one piece of food (counter) and then return to stand on a habitat in which their animals could be found. They do not have to return to the same piece of cloth. Check that each student is standing on a correct habitat type, e.g. make sure a fish is not standing on a cloth that represents the savannah.
6. At the start of each round, the instructor will call out an environmental problem, e.g. Uncle John has poisoned the river, a young boy has burnt down the savannah. The instructor then asks the student which type of habitat will be affected.
7. The instructor then shouts "go" and the participants run to collect their food. While they are away, the instructor removes one of the affected habitats.
8. When the participants return, one will be left without a habitat (coloured piece of cloth) to stand on. That participant is now out of the game, as he/she is "dead".
9. Some animals are found in more than one type of habitat and can choose either colour of cloth.
10. The game continues round by round until there is only one participant left. The instructor can remove multiple pieces of cloth in each round if there are lots of participants.

## Teaching points

- If we damage our habitats, then we are also destroying the wildlife that use it for their home.
- Some wildlife are found in multiple habitats but some are less adaptable. If we destroy the habitats of the ones that are less adaptable, their populations will be depleted more quickly than other wildlife.


## Wiidlifie activity \#1

## Tha's nuly han!




Aim: To teach participants about land use and the importance of communicating with other stakeholders.

## Number of participants:

Six.
:Age group:
14 years and above.

## Materials needed:

- Six gridded coloured card templates. (laminated - see below for reference).
- A5 laminated cards:
- Four x blue.
- Three x orange.
- Five x green.
- Four x purple.
- Five x red.
- Three x yellow.
- Eight lengths of 2 m rope.


## Setup

Create a large square (grid) on the ground, divided into 25 equal squares using the rope.

|  |  |  |  |  |
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|  |  |  |  |  |

Templates


## Instructions

1. Give each participant one of the six gridded coloured card templates.
2. Tell each participant that each card has a role and designate each one of them a role:
a. Indigenous community
b. Rancher
c. Protected Areas Commission
d. Agricultural farm
e. The government
f. Tourism lodge
3. Round one: Give participants their respective A5 coloured cards and instruct them to place their shapes in the grid immediately without talking.
4. Once they have done this, show that some persons' shapes are overlapping or that not everyone's shape fits.
5. Round two: Instruct participants that they have to work together to fit everyone's shape in the grid without any overlapping.
6. Participants will have to move their paper around to find a way for everyone's to fit. The more the participants talk to each other, the more they will find out, and eventually they will find a solution.
7. No one person can win by him/herself. Everyone wins when they all find a way to fit.
8. See one possible solution if participants are struggling.

## Teaching points

- Many different types of land users or "stakeholders" exist in the Rupununi.
- We all have to communicate to make sure that we are using the land in a way that is fair to all, sustainable and considerate of wildlife and the environment.
- Sometimes there will be conflict between stakeholders who have opposing interests, e.g. Ranchers and Indigenous communities, Protected Areas Commission and agricultural farms.


## Wiillilife activity \#8

## Olimplyara



Aim: To teach participants how wildlife population fluctuates in response to the availability of resource.

Number of participants:
Ten or more.

Age group: All ages.

Materials needed: None.

## Setup

1. Divide participants into two groups:

Group A and Group B.
2. Elicit from participants five key resources that any living organism needs to survive (shelter, warmth, oxygen, and food).
3. Elicit five hand signals that can be used to represent each of the resources.
4. Tell them that Group A are capybaras and Group B are resources. Have each group stand in a straight line 15 metres apart.

## Instructions

1. Tell each group to stand in a straight line with their backs to the other group.
2. Tell group $B$ that they have two minutes to decide which resource they would like to be (shelter, warmth, oxygen, or food) and get ready to make the hand signal that represents it.
3. Tell the "capybaras" that they have two minutes to decide on one resource they want and get ready to make the hand signal to represent it.
4. The instructor informs all the students that they will count to five, and at five, participants must all turn to face each other and continue making the hand signals they have chosen.
5. The "capybaras" have to look for someone in the resource group who is making the same hand signal as themselves. They have to run to find those matching partners and take them back to their side, where those resources then become capybaras.
6. Capybaras that cannot find a matching partner die, are converted into a resource, and join that group.
7. The game continues like this for another few rounds or until there are no more resources or capybaras left.

## Teaching points

- It's important to know that more wildlife and fewer resources result in a competition for scarce resources, and wildlife could likely die.
- Less wildlife can also mean that it is easier for a population to decrease.
- There is a carrying capacity of the environment, which means that the capybara population (wildlife as a whole) is limited by the resources available in the vicinity. If its needs are not met, the population can decrease.


## Wiillilife activity \#9

## Rupmanis nelo of líe



Aim: To teach the participants about how animals, plants and human activity are interconnected and interdependent on each other.

## Number of participants:

Ten or more.

## Age group:

All ages.

## Materials needed:

- Ball of string.
- Labels/lanyards.
- Pen.
- Paper.


## Setup

1. Before the game begins, the instructor writes the names of different components found in the local ecosystem (animals, plants, natural resources) on name tags. The number of name tags will vary according to the number of participants. Note: Be sure to target the components found in your district. For example, Red Siskin for the South, Sun Parakeet for South Pakaraimas. This makes the game more effective, as it is personalized.
2. Have all participants form a circle.
3. The instructor hands out a name tag to each participant.

## Some suggested names for tags

 Ité tree, monkey, clean water, healthy soil, macaw, agouti, earthworm, clean air, Kaiambe tree, anteaters, ants, bees, flowers, humans, pacu, plum tree, jaguar, Serum, tigerfish, caiman, turtle, snake, fly, bats, grass, mosquito, woodpecker, palm swift, tapir, red siskin bird, sun parakeet, otter, piyab, deer, capybara, Tiger pond, Mobey pond, Buffalo pond.
## Instructions

1) An example: The instructor tells all participants to look at their name tags and start thinking of whom they might have a connection with, or who might have a connection with them. For example, someone with the name tag "pond" can say that he/she has a connection with a "tigerfish", as that animal lives there, finds its food, makes more baby fish. The participants will then hold the end of the string and pass the rest to someone with whom they have a connection.
2) The instructor gives the ball of string to a participant and asks whom he/she might have a connection with or who might have a connect with him/her.
3) The participant then passes the ball of string to that person.
4) Slowly the ball of string is passed from one participant to another until everyone is connected (holding part of the string). There is no order in which to pass it and one person can receive the ball of string more than once.
5) End discussion:

- The instructor says: suppose that the pond gets polluted. "Pond" gives a pull on the string. Who felt the pull? All the people who felt it pull on the string themselves. To what point did that pull continue? Continue until everyone has felt the tug.
- The instructor asks: what does that say about one simple pond? (There can be an impact on everything because everything is interconnected).
- Repeat with another example but this time drop the string after tugging it, and everyone else who is affected lets go of the string.
- Eventually, the string should be lying on the ground, as everyone/ everything is affected.


## Teaching points

- All things are interconnected and interdependent on each other.
- The web shows how closely living organisms interact with each other, and if anything occurs to any part of the web, it will have an effect on everything/ the whole system.


## Wiillifie activity \#10

## Let's gofisting




Aim: To teach participants about sustainable and unsustainable ways of fishing.

## Number of participants:

Six or more.

## Age group:

All ages.

## Materials needed:

i) One container to represent a water habitat.
ii) 40 game counters to represent different kinds of fish. If no games counters are available then use anything as a substitute (e.g. cotton balls, bottle caps).

## Setup

1. Place one of the containers in the middle of the class.
2. Place 30 game counters in it.
3. Have six participants line up in front of the container. If there are any other participants, have them sit and pay attention to the activity.

## Instructions

Part one
Inform participants that we are going fishing and ask them to name the "container" after their favourite fishing hole.

1. Tell the six participants to listen as you give them instructions to follow:
(i) Participant one: Use a cast net to fish. Show us how you use your cast net first. Now take out the five Arapaima that you caught.
(ii) Participant two: Set your seine during spawning season. Show us how you set your net. Now take out ten Lukanani from the pond.
(iii) Participant three: Use your cast net. Show us how you use your cast net. Now take out the five Hassa that you caught.
(iv) Participant four: Set your seine at the mouth of a river during marching time. Show us how you do that. Now take out six tigerfish.
(v) It is breeding time. Each fish has two young fish (put two game counters in for every fish in the pond).
(vi) Participant five: Throw poison in the pond. Show us how that is done. You catch all the remaining fish, empty the pond and name the fish you caught.
(vii) Participant six: Throw your cast net. Show us how you cast your net. You catch.... nothing. Try again. Throw your seine. Anything? Are you sure? Try again. You are right - no fish.
2) Questions for the class:

- Why isn't he/she catching anything?
- Is there anything the fishermen/women could have done differently?


## Part two

Get another six participants for Part 2. It can be the same persons or six others. Put 30 game counters back in the container. Inform participants that we are going fishing and ask them to name the "container" after their favourite fishing hole.

1. Tell the six participants to listen as you give them instructions to follow:
i. Participant one: You fish with a hook and line. Show us how you do that. Now, you catch two lukanani. Take them from the pond.
ii. Participant two: You fish with a bow and arrow. Show us how you do that. Now you catch one big yakatu.
iii. Participant three: You dive for your fish. Show us how. Now you shoot four sunfish.
iv. Participant four: You go fishing with your fishing rod. Show us how. Now you have caught two boots.
v. It is breeding time. Each fish has two young fish (put two game counters in for each counter found in the container).
vi. Participant five: You place a fish trap with farine in the water. Show us how. Now you have caught a handful of piyab. Yum! Time to roast.
vii. Participant six: You are getting married soon. You want some fish for the party. You go with your hook. Show us how. You catch ten juicy fish of your choice and have a wonderful party.
2. Questions for the class:

- Why are there still fish in the container?
- What can we as fisherwomen/ fishermen do today, to continue to have fish in our ponds and rivers?


## Teaching points

- Sustainable ways of fishing and being mindful of our habits: take what we need without harming other animals and leave the habitat the same as we found it. In this way, others after us can also enjoy and reap the benefits.
- It's important to maintain our traditional practices as they are sustainable methods of fishing.
- You are not being told to not use nontraditional methods such as seines and nets. However, when you are using them be aware of where you use them, what time of the year, etc. You want to cause the minimum harm.


## Wiillifie ativity \#ll

## lones forsale



## Aim: To have participants reflect on the environmental factors that determine where wildlife live and the consequences that could occur if those habitats are destroyed. <br> Number of participants: <br> Preferably ten or more.

## Setup

1. Divide students into two groups. The numbers per group can vary according to the number of participants present. Group A will be real estate agents and Group B will be animals from the Rupununi.
2. Explain to Group A that real estate agents are persons who sell homes and they will be trying to sell homes to persons in Group B.
3. Explain to Group B that they are looking to buy some homes in the area and Group A will have to convince them to purchase one of their homes.
4. The end result: the best real estate agent is the one who is able to sell a home.

## Instructions

1. Tell Group B participants to pair up and say what animal from the Rupununi they'd like to be.
2. Tell Group A to form small groups of two or three persons and think of a name for their individual companies. Hand out paper and pencil to each group.
3. The instructor collects the names of animals from Group B, tells Group A what they are and gives them ten minutes to make notes of what kind of homes would be ideal/more attractive for each animal to buy. Things to consider: places to eat and drink, friendly neighbours, type of home, places to chill out, good for raising a family, etc.
4. Inform Group B that they also have ten minutes to discuss in pairs the kind of home they are hoping to live in.
5. After the ten minutes are up, tell the real estate companies to find a nice spot, and the animal pairs to circulate and try to find the ideal home to buy.
6. In the end, the animals vote on which home they'd like to move into now. If no homes have been chosen, state why.
7. Discussion:

- What would happen if these habitats/ homes were destroyed?
- Would these animals share their home space? What other types of organisms would they share with? What are the neighbours like?


## Teaching points

- All organisms have the same basic needs - shelter, food, water and air - but these vary according to animal. Bigger animals need more space and more food than smaller animals.
- Homes/shelters serve many purposes - they are places for animals to rest, raise families safely, hide from predators and even store food. By destroying their homes/habitats we put them at extreme risk.


## Willdife activity \#12

## Ilisicidel lliris




Aim: To understand the interdependence and interconnections of different organisms and the impacts of 4 habitat destruction.

Number of participants:
Ten or more.

Age group:
All ages.

## Materials needed:

- Chairs.
- Labels/lanyards.
- Pen.
- Paper.
- Musical instruments.


## Setup

1. Before the activity, write the names of different organisms found in one habitat on the labels/lanyards, e.g. savannah. Be sure to include breeding animals, e.g. male deer (stag) and female deer (doe), pollinators and plants as well. The chairs will represent the habitat and the participants are the community.
2. Arrange the chairs in a line with each chair facing an alternate direction. Note: The number of chairs and name tags depends on the number of participants.

## Instructions

1. Give all the participants an animal label and tell them to stand in front of any chair.
2. Play music, and have the participants circle around the chairs.
3. Stop the music, and the tell the children to sit down on chairs.
4. Now, remove a chair from the middle and say that a road has been built, dividing the habitat into two areas that are now isolated from each other.
5. Play the music again and have the participants circle around again.
6. Stop the music. Not all the participants will be able to find a seat and those who can't will be out. The following participants will ALSO be out. For example:

- if one of a breeding pair is out, the other is also out - if the female deer is out, the male deer is out as well;
- if a plant is out, then any animal that relies on it is out as well, as it would not have any food to eat;
- if a pollinator is out, plants are out too, as they rely on pollinators.
- if interdependent pairs of organisms have been divided on separate islands, then they are also out because they can't reach each other, e.g. to breed.

7. Remove two more chairs from the middle.
8. Play the music again, and the participants circle around.
9. Stop the music. Participants without a chair are out; also check point 6 to see if anyone else is out. Note: large predators, e.g. jaguars, need a lot of space to hunt. If they get trapped on an island that is too small, e.g. with fewer than five chairs, they are also out.
10. Play the music again and, in this round, remove more chairs in the middle when the music stops. Those chairs represent further habitat damage - deforestation, pollution, fire, etc. Be sure to discuss the impact on biodiversity after each round.

## Teaching points

- Human activity can have serious consequences on wildlife population if we are not careful.
- Even the smallest organisms (such as pollinators) have a role to play in our ecosystem.


## Wiillifie activity \#l3

## Onestepformaxid

## 人i人

Aim: To learn how some human activities can either help or hurt the environment.

## Number of participants:

Three or more.


Age group:
All ages.

## Materials needed:

None.

## Setup

Before activity, make a list of actions that are good and bad for the environment in relation to your situation/local context. See some examples below for reference:

- Good actions:
- Picking up trash around village.
- Not hunting female game animals, especially during breeding season.
- Starting a chicken farm and rearing some pigs.
- Only fishing for what I need.
- Bad actions:
- Throwing garbage in creeks and ponds.
- Overfishing during spawning season.
- Burning savannahs for fun.

1. As the instructor, tell the students to form a straight line and stand a few feet away from them.
2. Inform participants that we are going to play a game similar to $1,2,3$, red light. In this case, the instructor will name an action that could be either bad or good for the environment. If the participants think it's a good action they take a step forward. If they think it's a bad action, they remain in place.
3. Tell students that if they move at the mention of a bad thing, they need to explain themselves and, if it is not justified, they have to take a step back from where they were standing.
4. The first participant to reach the instructor and touch him/her on the shoulder wins.

## Instructions

1. Tell students that the instructor will now turn his/her back to the participants and name an action.
2. The instructor reads an action statement from his/her list and the participants listen.
3. Participants move forward or remain in place depending on what they hear.
4. The game continues in this way until a participant reaches the instructor and wins the game.

## Teaching points

- We need to be conscious of our actions, as they can have harmful impacts on the environment.
- Have participants be reflective and use good judgement when it comes to interacting with our environment Rupununi.
- Have participants address the bad actions that occur and think of ways to resolve/improve/reduce them from happening.


## Wiillifie activity \#14

## Bind mangagmant




Aim: To teach participants that to make an informed decision, it's paramount that they gather information about it first.

Age group:
12 years and above.

## Materials needed:

- Two sets of five pre-made danger cards).
- Two set of five blank laminated danger cards (white).
- Whiteboard marker (black).
- Two lengths of 10 m rope.
- One length of 20 m rope.
- Cloth blindfolds (note - same cloth used in Wildlife Activity \#6).
- Seven $\times$ blue.
- Seven $\times$ green .
- Seven $\times$ yellow.


## Setup

1. Set up your game layout according to image above. Mark start and finish on opposite ends.
2. Place danger cards in random spots across the open space for each group and be sure to have the situation part facing down.
3. Place participants into two groups and have each group stand at the starting line.

## Instructions

Do not tell participants that there will be two parts. Give instructions for Part one and when that has been completed, present Part two.
Part one

1. Inform participants of game rules:

- All participants except for one person will be blindfolded and they will have to make their way from start to finish (across their land).
- While crossing, they cannot step on the danger cards or on the other group's land. If they do, they are out.
- The one person who is not blindfolded will be the decision maker. $\mathrm{He} /$ she will give his/her team members instructions on the path to take.
- The decision maker cannot physically move the participants in the correct direction. However, he/she may move up and down the sidelines or remain at the starting line when giving directions.
- The persons blindfolded cannot speak, but only listen.
- Tell participants it's a competition the team to get the most members across the land the fastest wins.

2. Check that everyone understands the rules and answer any questions they may have.
3. Give blindfolds to participants.
4. Say ready, set, go, and have the teams begin crossing.
5. Declare victory to the group that was able to get the most members across.

## Part two

1. Inform participants that they will have a chance to do it again.
2. Tell them that the goal of the activity is to get all their members across safely regardless of the time.
3. Each group will have ten minutes to study the area, discuss among themselves any particular strategy to get across safely, and devise the best approaches on giving directions/ instructions.
4. Also, during the crossing, they can ask the decision maker questions about where they are going.
5. After ten minutes, tell the participants to put the blindfolds back on, say ready, set, go, and have the teams start.

## End game discussions:

- How did the first blindfolded experience feel?
- What about the second time you were blindfolded? Did you have the same feeling?
- Did you do anything differently in the second round? If so, what was it?
- Tell groups to pick up the danger cards and look at them. What does each situation involve? (activities occurring on their land/in their forest, environmental issues).
- When it comes to making decisions about what is occurring on their land or what resources are being used by villagers or outsiders, which approach based on the game would they take - the first or second ? Why?


## Teaching points

- When it comes to making informed decisions about your land usage make sure:
- you are fully aware of the situation (consequences, potholes, etc.).
- you have a plan/strategy.
- you have clear communication.


## Danger cards

- Feel free to add other activities/ environmental issues that could be/are occurring on your land.
- Make the danger cards in different shapes, sizes.



## Wiillifie ativitiy \#lt

##  <br> 

Aim: To inspire participants to be more interactive with their environment.
\#
Number of participants:
No limit.

## Age group:

All ages.

## Materials needed:

- 30-day Rupununi-friendly challenge sheet (A4 laminated).


## Instructions

1. Tell students that they are going to do an environmentally friendly 30 day challenge. For each day that month, they will select one activity to do.
2. During the month, the instructor checks in to see how everyone is progressing.
3. Encourage students to take photos to document their activities and, at the end of the month, they will gather to exchange experiences that have occurred over the past month.

## Teaching points

- Encourage participants to start thinking of a more eco-friendly lifestyle.
- Get participants involved in different activities around the community.
- Create research autonomy by encouraging them to learn about their environment and ways to protect it.


#  Ine activity day jo for In montih 

| Clean up an area <br> in your community | Volunteer in your <br> community | Plant a fruit tree | Sit with an elder <br> and learn a story <br> about animals. <br> Share that story <br> with a friend | Make a bird <br> friend. Make a <br> bird feeder from <br> recycled material |
| :---: | :---: | :---: | :---: | :---: |
| Learn importance <br> of three wildlife <br> species in Rup. <br> and their names <br> in Wapishana or <br> Macushi | Do some research <br> on what "a <br> sustainable <br> lifestyle" is | Help a neighbour/ <br> friend with some <br> gardening work | Support a local <br> business in your <br> community | Sew a cloth bag <br> to use as a <br> shopping bag |
| Learn a traditional <br> skill (e.g. cotton <br> spinning, basket <br> weaving) | Meditate. Sit <br> cross-legged, close <br> your eyes, take <br> deep breaths in <br> and out. Relax for <br> 5 minutes | Find a ranger, go |  |  |
| bird watching |  |  |  |  |



Who is up for a challenge today?

\#1 Turtle beach: Everyone trying to avoid the hunters capturing them while they feed.

\#1 Turtle beach: Kid picking up game counters (food) while having his tail removed by a hunter.
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