

LOW POLY

1.8

# ANIMATED ANIMALS

by POLYPERFECT



# Thanks!

First of all, thank you for purchasing our pack, we really appreciate that! We are putting lot of effort to this.

Just you to know – we are planning to expand the list of the animals in the future with free. updates of the pack. Check out our FB page for any news.

# UPDATES

## — VERSION 1.8

So we have been hard at work making sure to keep the animal pack up to date! We have listened to your feedback and for this Update have added both a JellyFish, Starfish and some new functionality that allows the animals to match the rotation of the floor beneath them. Also the audio manager has been improved

### Match Rotation

For this to work, you will need to set the **LAYER** of the floor you want the animals to walk on set to the word (“Terrain”), to do this. Simply click the layer option and add a new one.



After this, look at the Wander Script attached to each animal and simply tick the tick box next to “**Match Surface Rotation**”. Now see your animals will match the rotation of the floor. Use the “**Surface Rotation Speed**” box to set the speed you want the animals to rotate at.

# Animals

Each animal has multiple version of textures for more diversity. You can also create your own.

- |              |             |            |
|--------------|-------------|------------|
| - Bear       | - Giraffe   | - Shark    |
| - Polar bear | - Horse     | - Snake    |
| - Cat        | - Jellyfish | - Spider   |
| - Cow        | - Orca      | - Starfosh |
| - Deer       | - Penguin   | - Wolf     |
| - Elephant   | - Rabbit    |            |
| - Fish       | - Seagull   |            |

## Demo scenes



We encourage you to explore our demo scenes with interactive interface for playing our animations. You will find them in DEMO scenes folder. Just switch to game and hit play.

# WANDER SCRIPT

Hello and welcome to the tutorial on how to use our new wander script in Low Poly Animals Pack

## About

The wander script is a whole new way of using our animals, we have taken the idea of AI (*Artificial Intelligence*) and turned it into a more manageable script, it lets you decide which animals you want at the top of your food chain and gives you the flexibility to use them in your own world.

Before you go ahead and make a killer army of bunny rabbits, I suggest you look at this guide and see what each part of the wander script does, so you don't get lost.





# How it works

So, lets move onto the test scene where will be able to talk you through some of the awesome new features of the script such as the new NavMesh option, allowing you to make the animals walk across your terrain. So for nav mesh to work, all you simply need to do is make the objects that you want the animals to be able to walk on set to static, this will allow you to NavMesh bake onto the object and allow the animals to walk around. *(If you are uncertain how to create a NavMesh please refer to Unity Documentation).*



For the animals to work in your scene, you must place two empty game objects in your scene and attach the **ANIMAL MANAGER** script to one, and the **AUDIO MANAGER** script on the other. This controls the animals and the wander scripts attached to them, it is important that you have it in the scene or the animals may not work.

# Properties

## — SPECIES

This is nice and simple, this simply indicates what species the animal is.

## — WANDER ZONE

The Wander Zone indicates how far the animal is aloud to wander from its origin point, set this as high as you need to if you want the animal to be able to travel across your world.

## — DOMINANCE

This is the first part of our clever system, this indicates how high up the food chain the animal is. This can be changed to your liking, therefore allowing you to create a killer rabbit army.

## — AWARENESS

This range is how far this animal can sense a predator, for instance if there is a bear lurking nearby, a deer will run off if it sees it in its awareness range. This will stick to the animal as it travels around it wander radius.

## — SCENT

This is how far an animal can sense its prey, this will stick the position of the animal as it travels around its wander radius.

## — STAMINA

his is how far the animal can run for, before it gets tired. Lets hope its up high for those killer rabbits to not catch them.

## — POWER

This is the attack of an animal, the higher this number, the more damage it will do to another animal when it attacks.

## — TOUGHNESS

This means the animals health, setting this higher will allow the more powerful animals to not damage this one as much.

## — AGGRESSION

This is simply the chance that this animal will attack another animal, setting this to 100% WILL MEAN IT ATTACKS EVERYTHING. 50% will mean it might attack half the time.

## — TERRITORIAL

This means that this animal will attack another animal of the same species, allowing the king of the forest to stay the king.

## — STEALTHY

These animals cannot be detected by another animal, great for spiders and snakes which are less obvious.

<b>AI</b>	
Species	Horse
Wander Zone	30
Dominance	5
<b>Awareness</b>	<b>15</b>
<b>Scent</b>	<b>0</b>
Stamina	50
Power	0
Toughness	40
Agression	<input type="range"/> 0
Attack Speed	0.5
Territorial	<input type="checkbox"/>
Stealthy	<input type="checkbox"/>

That is all the quick options to allow the animals to behave the way that you want them too.  
Next is states of the animal which show a visual indication of what it is doing at each state,

## States

☒ **Wander Script (Script)**

Script
WanderScript

**Animation States**

▼ Idle States

Size
2

▶ Nothing

▶ Eating

▼ Movement States

Size
2

▶ **Walking**

▶ **Running**

▼ Attacking States

Size
0

▼ Death States

Size
1

▶ Dead



# IDLE STATES

The screenshot shows the 'Wander Script (Script)' window with a tree view on the left and a configuration table on the right. The tree view is expanded to 'Idle States', which contains 'Size', 'Nothing', and 'Eating'. 'Nothing' and 'Eating' are further expanded to show their properties: State Name, Animation Bool, Min State Time, Max State Time, and State Weight.

Property	Nothing	Eating
State Name	Nothing	Eating
Animation Bool		isEating
Min State Time	0	2
Max State Time	1	20
State Weight	2	1

- **SIZE**  
How many idle states this animal has, changing the layer weights later will allow you to have more generic idles play more often and less generic playing only every now and again.
- **MIN STATE TIME**  
The length of time that the animal is has to stay in that.
- **MAX STATE TIME**  
The length of time that the animal is allowed to stay in that state.
- **STATE NAME**  
Name your state, call it whatever it is.. So eating, standing, peeing, whatever the animal has
- **STATE WEIGHT**  
This is weight of this state being chosen over another, for instance if the layer weight of eating is set to 2, the layer weight of standing was set to 1. Then because the weighting is higher on the eating, it will most of the time choose to eat over choose to stand.
- **ANIMATION BOOL**  
The name of the Boolean set up in the animator to call the animation to play, if you are setting up your own animals please use the same name here as the same set up in the animator. If you are using the ones provided, these have already been set up with the animations currently provided for each animal.

▼ Movement States	
Size	2
▼ Walking	
State Name	Walking
Animation Bool	isWalking
Max State Time	10
Move Speed	1
Turn Speed	100
▼ Running	
State Name	Running
Animation Bool	isRunning
Max State Time	10
Move Speed	20
Turn Speed	200

#### — SIZE

How many movement states the animal has, eg. Running, walking, Sprinting, Crawling, Hopping.

#### — STATE NAME

Name your state.

#### — ANIMATION BOOL

The name of the Boolean set up in the animator.

#### — MAX STATE TIME

The length of time that the animal is has to stay in that.

#### — MOVE SPEED

The speed at which the animal moves when in this state, e.g.running should be faster than walking.

#### — TURN SPEED

The speed at which the animal can turn when in this state.

## ATTACKING STATES

— **SIZE**

How many Attacking states the animal has.

— **STATE NAME**

Name your state.

— **ANIMATION BOOL**

The name of the Boolean set up in the animator.

## DEATH STATES

— **SIZE**

How many Death states the animal has.

— **STATE NAME**

Name your state.

— **ANIMATION BOOL**

The name of the Boolean set up in the animator.

The screenshot shows a Unity Hierarchy/Inspector view. On the left, the Hierarchy panel lists the following structure:

- ▼ Attacking States
  - Size
  - ▼ Attacking
    - State Name
    - Animation Bool
- ▼ Death States
  - Size
  - ▼ Dead\_1
    - State Name
    - Animation Bool
  - ▼ Dead\_2
    - State Name
    - Animation Bool
  - ▼ Dead\_3
    - State Name
    - Animation Bool

On the right, the Inspector panel shows the following values:

- Size: 1
- State Name: Attacking
- Animation Bool: isAttacking
- Size: 3
- State Name: Dead\_1
- Animation Bool: isDead1
- State Name: Dead\_2
- Animation Bool: isDead2
- State Name: Dead\_3
- Animation Bool: isDead3

## Navigating Animals

You can either use **Nav Mesh Agent Script** with **NavMesh**

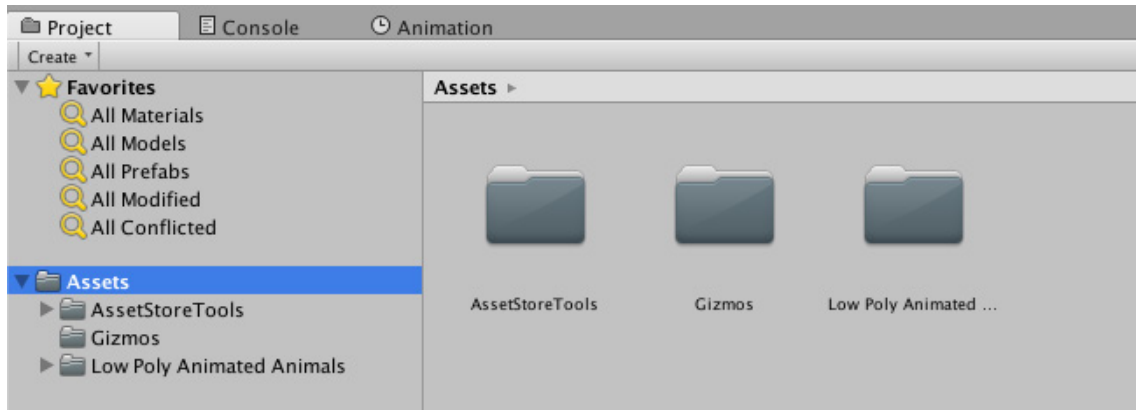
<https://docs.unity3d.com/Manual/nav-BuildingNavMesh.html>

or our less advanced **Character Controller script**. Or both :)

# Gizmos

if you turn these on then you will get three coloured rings that go around the animal.

**RED** – Scent, **BLUE** – Wander, **PINK** – Awareness



*If you would like visual indication with a little icon above each circle, please drag the Gizmos folder next to the assets folder in the project window. It should look like this:*

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