

# Rooster AI

FOREWORD: not all text within this document has been approved or discussed yet by lead game design and all numbers are placeholders until balancing has started. *Any text written with this markup should be considered to have a lower priority until it has been approved by lead design.*

## Base Rooster Behaviour

### Default / Manic AI

Whenever a rooster gets **mishandled**, by e.g. a missed catch or a tackle, it will **enter Manic AI** mode. During manic AI the rooster runs around in a **wild panic** making him hard to catch and his pattern **unpredictable**. *The rooster's speed during manic AI will be around 110% the average player speed. Making it hard to catch up to it.* The rooster's **pathing will change** at a random interval between every 2 to 3 second, changing direction in a **slightly random** manner. For the change in direction take the following formula:  $\{ R = R + 180 + (-a/2) + (r * a) \}$ , where: "R" = Current rotational value along the Z axis; "r" = random number between 0,00 and 1,00; "a" = the maximum angle offset. The formula forces the rooster to take a **random direction within the angle offset** so that it'll be hard to catch but so that it **cannot run away** from the players, giving them a chance to catch him.

Manic AI mode **stops after a short period** of time (*5 seconds*) after which the rooster will take flight and **remove itself from the map** and from play.

## Optional

### Calm AI

*Calm rooster AI only **occurs when** the rooster is in a situation where **it feels at ease**. During calm AI the rooster will be walking in a **slightly random circle pattern** with in a short radius of either it's **spawn/placement position**. The rooster will slowly **move away from any other pawn** in the game except other roosters so that he will **always have a clear path** to walk in. The **movement speed** of the rooster when in this mode will always be around **half speed the average player speed**. This way we can assure that grabbing an allied rooster should not be a difficult task for the players.*

### Slumber AI

*Whenever a rooster has been in **calm AI** mode for more than **30 second** it'll enter slumber AI mode. During slumber AI the rooster sits down and **doesn't move** anymore until otherwise provoked. It is in all effects sleeping and **switching** from this mode into any other **mode** takes a short amount of **time** ( around 1 second).*

## Territorial Rooster Behaviour

### Within ally team's Barn or Farm

*Whenever a rooster is within an allied zone it'll act under the **calm AI** and **move towards** to closest Point of Interest, this often being the **in side of a barn** to then be removed from the game. Possibly when a rooster enters an allied zone it'll then hasten the production of the next egg that the barn will produce so that the rooster is not lost.*

### Within enemy's Barn of Farm

*Whenever a rooster is thrown into an enemy's zone it will, after landing, stand up and **rush towards the enemy barn** and **deal** it's **damage** value.*

### Within the world

*Whenever a rooster lands in an **area** of the map **that belongs to neither players** it will enter manic AI mode inciting a frantic **chase** for the surrounding players **to catch the rooster** in time.*

### Wild Roosters

*Players have a low chance of finding neutral roosters and eggs in the wild. Roosters found this way have an even chance of being in either in **Calm AI** or **Slumber AI**. Once these are picked they act as any other rooster in the game.*

### Power Ups

*Some rooster might show different behaviour under the effects of different Power Ups. The Cockblock rooster for example will not move and will be in slumber AI wherever it's placed. This section will be updated over time once more power ups have been decided upon.*