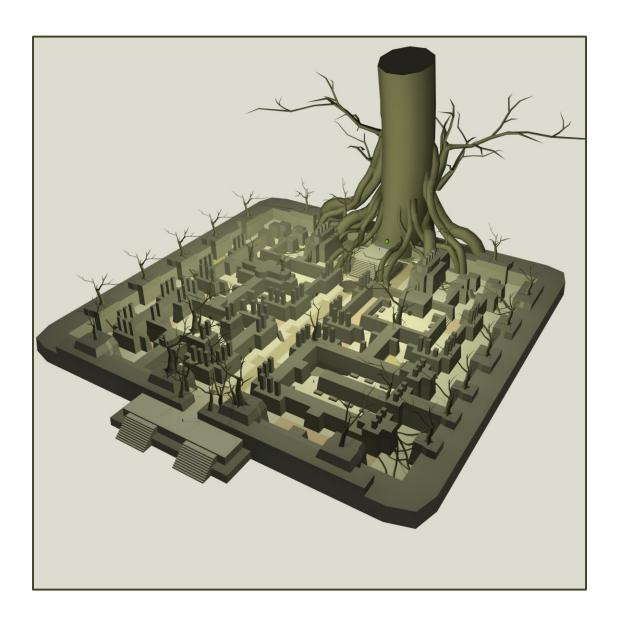


-A Level Design Document for Secret of Brokengate by P M Norris-

Players 3<sup>rd</sup> Person Single-Player

Genre Action RPG (NOT action w/ "RPG elements")

Target Audience YA—Mature



# - LEVEL OVERVIEW-

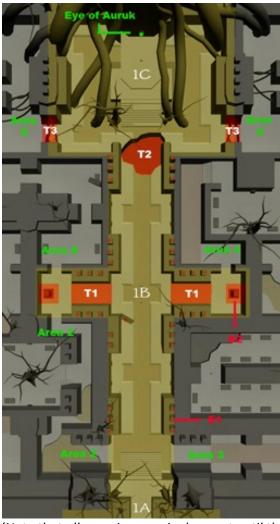
Tarish is an ancient, crumbling city of mud brick nestled deep within the swamps of Dagora Fen. A colossal Caelborn at the city's center houses a powerful but cursed item called the Eye of Auruk. The ever shifting marshland and inhospitable weather of Dagora has lain to waste all but the city's absolute center, where only the basement level remains. The architecture is rudimentary at best, somewhat comparable to that found in early Mesoamerican culture. The Saurokhai, an ancient reptilian race are entombed throughout the city. The Slaves of the Saurokhai have been buried along the outskirts of Tarish (off map). Those whom have died as warriors or kings were entombed vertically within mud brick columns, or "pillar-tombs" throughout the city. Pillar-tombs stand at around eight meters, with a single Saurokhai warrior, king, or magi in each. Many of these tombs are still standing along the city's main thoroughfare and play an integral role in the level's mechanics (see Waking the Dead).



The warm, marshy climate of Dagora Fen is typically sunny and humid with bouts of mild to heavy rainfall. A light squall appears on the day our player's avatar arrives bringing with it a mild, yet persistent shower. Despite the squall, beams of pale sunlight continue to pierce through the clouds casting an eerily serene glow over Tarish. As the sunlight touches the damp earth steam begins to appear forming a blanket of rising mist over the ground. Various non-threatening creatures such as small snakes, toads, and centipedes appear, escaping their burrows.

# -LEVEL GUIDE-

## Area 1



(Note that all enemies remain dormant until the Eye of Auruk is stolen—see "Waking the Dead").

#### 1A

A pair of large Caelborn trees forms the city's inner gate. From this elevation the player can see that Tarish Hall once had a second level, and in some inaccessible parts still does. A great stairway consisting of meter-high landings leads down to the main floor.

## 1B

Rows of pillar-tombs (E1) line either side of this wide, ruined passage. Halfway into the thoroughfare is a crossroad connecting 1B with areas 2, 4, and 5. A mudslide sits at either side of the crossroad, each terminating at a Saurokhan pillar-tomb (E2). If the player triggers the "Slip n' Slide" mechanic (see Traps) he will crash into the monument, toppling it over. The toppled pillar-tomb crumbles upon landing, revealing the remains of a highly-decorated Saurokhan. The remains can be sifted through to obtain a useful item (item pending). The item only applies to the second Saurokhan pillar-tomb toppled, the first

always coming up empty. The Saurokhan in each toppled tomb can be stomped upon to prevent resurrection.

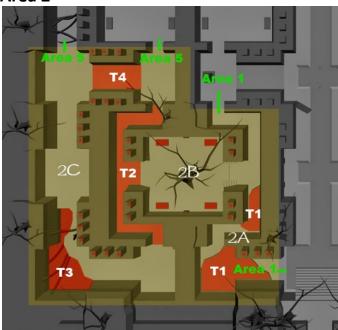
- Enemy—Saurokhan (2)
- Enemy—Saurokhai (up to 71)
- Item—(Pending)
- Trap—Mudslide (2)

#### 1C

The colossal Caelborn tree around which Tarish was constructed rests at the far end of the map. A sinkhole trap (T2) has been placed at the transition between 1B and 1C. Treading within ten meters of its radius triggers the trap and the sinkhole opens up. This trap permanently blocks the player from entering 1C from 1B and must go around. Overgrowth traps (T3) guard against entrance into 1C from areas four and five. The Eye of Auruk, a gem of immense power and influence over the Saurokhai people lies half-buried within its roots. The Eye holds a devastating curse that, if removed, will awaken the long-dead warriors of Tarish Hall (see Waking the Dead).

- Item—Eye of Auruk
- Trap—Sinkhole (1)
- Trap—Overgrowth (2)

## Area 2



(Note that all enemies remain dormant until the Eye of Auruk is stolen—see "Waking the Dead").

#### 2A

Upon entering this area from 1A the player immediately stumbles onto a quicksand trap (T1). Another smaller quicksand trap is encountered further along the narrow passage near the bottom of the stairs leading to 2B.

- Enemy—Saurokhai\* (up to 6)
- Trap—Quicksand (2)

#### 2B

This elevated cloister contains a large central Caelborn tree surrounded by four sarcophagi. Entombed within each of the sarcophagi are the remains of a Sauromagi. Locked burial chamber doors are positioned between two of the sarcophagi on either side of the cloister. The runoff of mud from the cloister formed a mudslide (T2) at the base of the far staircase. The current of the mudslide flows out from the main cloister and ends at 2C north and south.

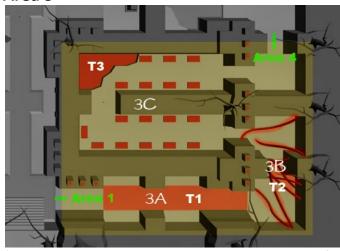
- Enemy—Saurokhai\* (up to 16)
- Enemy—Sauromagi\* (4)
- Trap—Mudslide (1)

#### 2C

The Passage 2C winds halfway around 2B before linking up with Area 5. From the south end a sinkhole trap (T3) is encountered, but does not take out the passage when triggered. Immediately beyond the sinkhole is an overgrowth trap that must be destroyed before the player can continue in this direction. Another mudslide trap (T4) sits between the two entrances into Area 5.

- Enemy—Saurokhai (up to 30)
- Trap—Sinkhole (1)
- Trap—Overgrowth (1)
- Trap—Mudslide (1)

## Area 3



(Note that all enemies remain dormant until the Eye of Auruk is stolen—see "Waking the Dead").

## 3A

Three pillar tombs tower over the entrance to Area 3. Just beyond the tombs is a long mudslide (T1). This slide carries the player directly into the overgrowth trap in 3B.

- Enemy—Saurokhai (6)
- Trap—Mudslide (1)

### 3B

As the player turns the corner he is faced with a large overgrowth trap. About halfway into the overgrowth trap lies a hidden sinkhole (T2).

Enemy—Saurokhai (12)

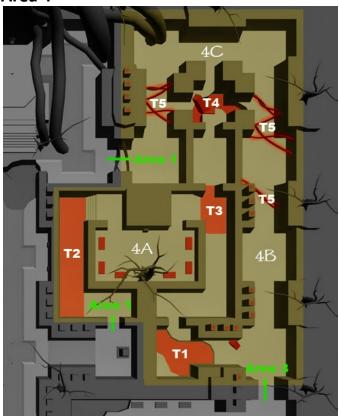
- Trap—Overgrowth (1)
- Trap—Sinkhole (1)

#### 3C

The long wrap-around corridor of 3C is lined with a series of large Saurokhai tombs. The two westernmost tombs each house the remains of a Sauromagi. A sinkhole (T3) lies to the north corner and will open up if the player approaches any of the three tombs within that zone. Any Saurokhai/Sauromagi remains that are housed within these three tombs will be destroyed with the sinkhole and will not be raised by once the Eye of Auruk's curse is activated.

- Enemy—Saurokhai (18)
- Enemy—Sauromagi (2)
- Trap—Sinkhole (1)

# Area 4



(Note that all enemies remain dormant until the Eye of Auruk is stolen—see "Waking the Dead").

# 4A

The only entrance to the elevated terrace in 4A from Area 1 is by Mudslide (T2). The terrace contains a small viperwood tree that overlooks six tombs. The two tombs closest to the tree house Sauromagi remains. Directly across from the tree is a sealed crypt. Beyond the terrace to the north is a small mudslide (T3) leading into 4C.

- Enemy—Saurokhai (4)
- Enemy—Sauromagi (2)
- Trap—Mudslide (2)

#### 4B

This long corridor extends from areas 3 and 4A to 4C. A sinkhole trap (T1) lies to the south end. Ten pillar tombs and two overgrowth traps (T4) line the walls of 4B.

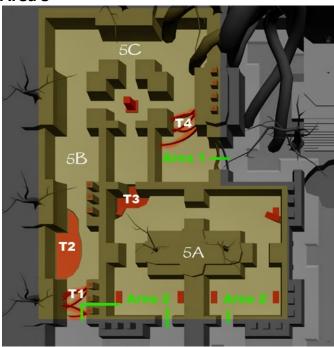
- Enemy—Saurokhai (20)
- Trap—Mudslide (1)
- Trap—Overgrowth (2)

#### 4C

This zone's defining feature is the large Saurokhan (king) pillar tomb surrounded by a hidden sinkhole trap (T4). If activated, the sinkhole will swallow the tomb, destroying the remains inside. This trap may be best sprung prior to activating the curse as it will spare the player from having to battle this particular Saurokhan. The central area is flanked by two overgrowth traps (T5), with the west trap leading to 1C.

- Enemy—Saurokhai (12)
- Trap—Overgrowth (1)
- Trap—Sinkhole (2)

## Area 5



(Note that all enemies remain dormant until the Eye of Auruk is stolen—see "Waking the Dead").

## 5A

This area consists of four small cloisters each joined by a narrow doorway. Four Saurokhai and two Sauromagi tombs are housed here as well as a single toppled pillar tomb from area 1. A sinkhole (T3) extends from the northwestern tomb and into 5B.

- Enemy—Sauromagi (2)
- Enemy—Saurokhai (5)
- Trap—Sinkhole (1)

#### 5B

An overgrowth trap (T1) greets the player as he enters 5B from 2C. Six pillar tombs line the tops of the inner walls. A sinkhole (T2) hugs the lower west wall just after the overgrowth trap.

- Enemy—Saurokhai (12)
- Trap—Overgrowth (1)
- Trap—Sinkhole (1)

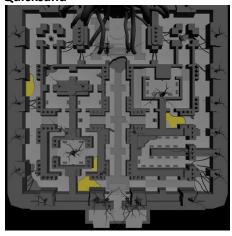
#### 5C

This area is almost identical to 4C in that it is dominated by a single Saurokhan pillar tomb. Four additional Saurokhai pillar tombs tower above an overgrowth trap (T4).

- Enemy—Saurokhan (1)
- Enemy—Saurokhai (8)
- Trap—Overgrowth (1)

# -Traps-

## Quicksand

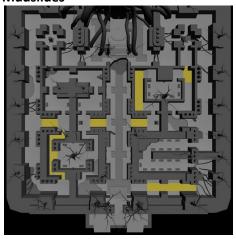


This trap is designed to simply impede player movement, but can be lethal if caution is not taken. Quicksand appears to be nothing more than the continuing muddy path until the player attempts to traverse it. He immediately falls into syrupy waist-deep mud that very slowly pulls him downward. As he moves (any direction) the traps mechanics are triggered and the player begins to sink even faster. Jumping is most likely the player's first reaction to prevent sinking, but this does nothing more than trigger the jump animation. If the player doesn't react decisively the character will succumb to the quicksand, ultimately causing suffocation and death.

Quicksand traps contain hidden creepers just below the murky surface leading out to safety. Here, there will be some sort of action to alert to the player when a creeper is felt by the character, such as vibration feedback from the controller. Now the player can tap a button to grip the vine and pull himself to safety. In addition, swamp creatures can be added to this trap to make it particularly nasty:

- Biting & stinging insects
- Snakes
- choking vines

#### Mudslides

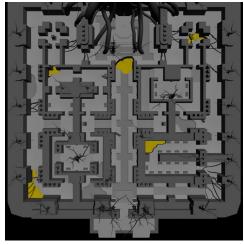


As heavy rain washes over the city the brickwork gives way to mud, causing severe runoffs in certain areas. These traps are almost indistinguishable from otherwise normal roads, detectable only by a sound effect of rushing water within a five meter radius. As the player draws nearer the sound effect grows louder. A thin traversable mud bank runs along either side of the mudslide between the main slip zone and the adjacent walls. By walking along this narrow strip the player can avoid the mudslide without having to find another way around. Mud banks hinder player speed by fifty percent. Additionally, small washed away debris can sit at the far end of the mudslide if it is decided that this trap should cause the character physical harm. Note that such debris would add a visual queue to the otherwise undetectable trap for cautious players.

- Jagged pebbles, masonry
- Broken floor tiles
- Thorn branches

The mudslide mechanic is dependent upon the player's move direction and speed. If a player treads at or below normal walking pace within the trap zone he will have a chance to step back without triggering its full mechanic. Any movement beyond normal pace, e.g. running will sweep the character off his feet, sending him spiraling toward whichever way the runoff flows.

# **Sinkholes**

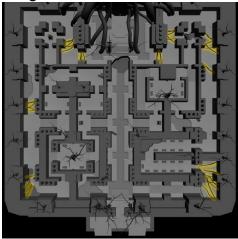


Sinkholes are not lethal, but a nuisance nonetheless. They open up in predesigned areas swallowing anything in their vicinity permanently blocking a particular path. The player does not necessarily have to be directly over the sinkhole to be swallowed when the trap is triggered. Utilizing the mudslide's "Slip 'n Slide" mechanic, the surrounding two to five meters of the hole creates a slick that drags the player inward. If swallowed, the player may escape in one of two ways:

- Climb out with his hands, grasping at the soft\* mud walls (fast, but difficult)
- Wait for the rain to fill the hole with water and climb out (easy, but slow).

Only soft mud can be grasped when climbing out of a sinkhole and, coincidentally, only lies on the same side from where the player originally fell. Thus, the player cannot climb out on the adjacent side and must find another way around once he reemerges.

Overgrowth

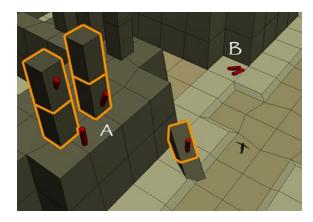


Several passages are overgrown with thick tangled vines that ultimately block the player's path. The vines can be hacked apart using any bladed weapon—the larger the better. Each creeper has its own health and armor assignment which can be predesigned, or generated randomly during the loading of the level. Numerous exposed roots line the ground along the trap area, tripping the player as he chops his way through. If the player is tripped he will receive injury from the many thorns which cover the vines.

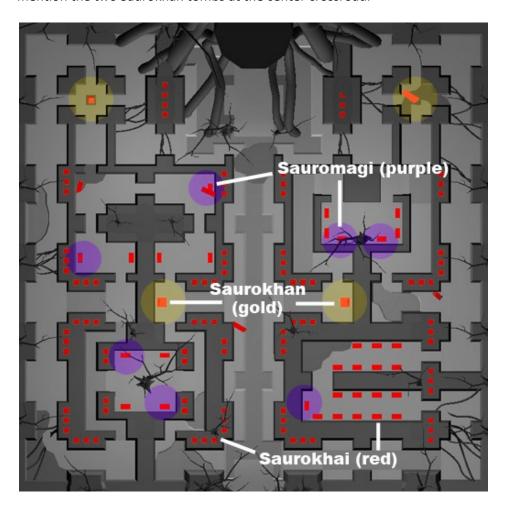
# - WAKING The DEAD-

## Eye of Auruk

The character's main objective in this level is to steal the *Eye of Auruk*, but in doing so a necromantic curse is put into motion. The light rainfall quickly becomes torrential, battering the mud brick masonry & causing the many pillar-tombs to crumble and dissolve. As the monuments turn to mud skeletal Saurokhai begin to emerge (A); their limp, shambling bodies sliding over the walls with the runoff. They collect in writhing piles of mud and bone in the streets (B) before rising to their feet to attack. This form of enemy spawning is triggered by a mechanic that places an imaginary aura of fifty meters around the character. This aura should be clipped by collision geometry within the walls to avoid spawning beyond the player's foreseeable path.



The overwhelming number of undead Saurokhai warriors means that the player must act quickly to navigate his way out of the city. Area 1B is especially dangerous with 36 total pillar-tombs, not to mention the two Saurokhan tombs at the center crossroad.



# **-** F かくかによっ

#### Saurokhai

The Saurokhai (lit. Reptile Warrior) are a primitive race of bipedal reptilian humanoids standing at an average of two and a half meters. Their lean, robust bodies are exceedingly strong and enduring, and are equally capable on land as they are in water. Saurokhai are covered with large, thick scales ranging from dull brown to gray in color, with thick black stripes along their back. The Saurokhai's facial features are almost indistinguishable from that of a typical lizard's in that they are broad and elongated with small, razor-sharp teeth. Being warriors they were buried with their weapons, armor, and in rare cases magical items.

#### Weapons

Saurokhai weapons are randomly generated short spears and hand axes. An additional modifier is applied to this assignment determining if a Saurokhai will have a shield, or additional offhand weapon. Regardless of which is generated, both shield and offhand weapon are used only for blocking against player attacks and.

Note: The Saurokhai in Tarish are long-dead, skeletal versions of their former selves (and single minded too!). Once they spawn from their pillar-tombs and animate, they immediately lumber toward the player with weapon(s) drawn.

#### Saurokhan

The Saurokhan (lit. Reptile King) are the race's leaders. Though physically similar to the lesser Saurokhai, Saurokhani grow to three meters in height and are substantially darker in color. In addition they are stronger and more intelligent, making them largely superior and fit to rule. Typical Saurokhani weapons include who-handed halberds and double axes.

# Sauromagi

The Sauromagi, (lit. Reptile Caster) are the elite spellcasters of the Saurokhai people. They are mainly practitioners of nature magic, or "Natura", as well as divination and necromancy. Physically, they are generally halfway between the Saurokhai and Saurokhani, in that they are very tall (three meters) and considerably lean for their size. Sauromagi scales tend to be much smoother and than that of their brethren, and are usually dark with a hint of indigo.

# -Garland-

Garland is a supporting NPC (companion) who is only playable within the swamp/jungle region of Dagora Fen. Players may switch between his main character's avatar and Garland. Whichever avatar is not in use with be controlled via AI.

#### Introduction

Garland is first encountered upon the footsteps of a ruined monastery rummaging through the smoldering rubble for his fellow clansmen. An ashy trail leads from the monastery entrance to a heap of burned bodies in a small clearing. After some dialogue (pending) he will assist the player with any quest within the borders of Dagora Fen for a price.

## **Appearance**

Garland is a seven and a half foot tall saurokhai warrior, and appears as a cross between Dungeons and Dragons' "lizard folk" and Unreal Tournament's Krall. Garland's body is lean, robust, and exceedingly enduring. A thick and scaly hide protects the entirety of Garland's body, ranging from dark grey-brown scutes along his back and limbs, to smooth, light scales on his underside. Black (tiger) stripes run along his back and tail. Garland's hands and feet are long and clawed, with tough webbing at the base of each finger and toe. Garland's facial features greatly resemble that of a large lizard, with a flat brow, broad, elongated snout, and dozens of small, razor-sharp teeth along the inside of his mouth. His bright yellow eyes have vertically elliptical pupils not unlike an asp's, sunken into a fixed narrow glare.

Garland wears traditional Ironclaw battle attire: An oriental-style iron girdle complete with faulds, left and right pauldrons, double strapped baldric, and namesake ironclaw gauntlets. The bottom band of the faulds is fitted with a whetstone to sharpen his claws. Garland will sharpen his claws on his sides during times of player inaction via looping animation. This animation is not unlike wiping one's hands on his pants as to dry them. Only with Garland's claws sparks discharge.

## **Combat Mechanics**

### Claw

Jab

Ironclaws are Garland's main mode of attack. They appear as thick leather gauntlets with bladed fingertips reaching up to three and a half feet in length. At the base of each blade is a short but thick three-link chain connecting each to the next. These chains provide the ironclaw with the additional utility of ensnaring enemy weapons safely between its fingers (see 'Block'). The thumbs are fitted with a curved eight-inch iron talon resembling a raptor's claw.

Jab is Garland's weakest, most accessible strike and a necessary lead-in for more powerful subsequent attacks. With Jab Garland will forward-strike at an enemy's head or neck. The location of the strike will depend upon that enemy's defenses and anticipated counterstrikes. Wherever a given enemy is most open and/or vulnerable is where Jab's mechanics will assign the strike. Particularly successful Jabs will impale the enemy, inflicting his wounds twofold. From here Garland can choose to either pull his opponent close enough to be kicked away, which has a chance of knockdown, or follow up with an additional Jab from the opposite hand. The follow-up Jab will automatically impale the enemy's midsection making another tier of options available. Garland can either kick the opponent off of his blades again like in the previous maneuver, or hoist him overhead. Once hoisted, the enemy can be thrown in any direction- including at other creatures.

"Jab Chain"

- Miss/blocked (end)
- Hit (continue)
- Standard damages (end)
- Impale (continue)
  - Kick off (end)
  - Follow up Jab (other hand, continue)
    - Kick off (end)
    - Hoist overhead (continue)
      - Toss (choose direction, end)

## Rake

Rake is Garland's diagonal strike and although significantly more powerful than the Jab, it lacks the range of follow-up maneuvers. Each strike begins at the opponent's (bipedal) left or right shoulder, depending upon which is most vulnerable or least protected. The Rake continues on a downward path across the enemy's chest and midsection before exiting from the waist. At the start of Rake Garland will be able to immediately follow up with an additional rake with the opposite hand. The follow-up Rake is a mirror action of the first, but inflicts only half damage. At the rake's end Garland's arms will be crossed and in position for a final blow. This last maneuver in the rake sequence brings Garlands arms back around in an arcing motion across the opponent's midsection causing substantial damage in addition to knockback.

"Rake Chain"

- Miss/blocked (end)
- Hit (continue)
  - Standard damages (end)
  - Follow up Rake (other hand, continue)
    - Hit (end)
    - Hit (continue)
      - Gut Rake (end)

## **Tail Functions**

Garland has a powerful five foot tail which he integrates into his fighting style in two ways.

# Tail Whip 180

The tail whip can be used anytime during combat to knock an enemy to the left or right. This is primarily a strategic maneuver used to reposition opponents during a melee and does not inflict any permanent damage.

### Tail Trip 360

With this maneuver Garland engages in a crouching 360 spin that trips all bipedal and quadrupedal opponents within a two meter radius.

#### Supplemental Actions (SA)

Supplemental actions are the side effects of given maneuvers, such as tail whip or tail spin. Usually these actions do not cause any permanent damage to an opponent, only serving Garland as a tactical utility during a melee.

#### Knockback

The knockback SA applies to the tail whip and dash maneuvers. With knockback Garland's opponent will be shifted ten feet away and take a 20% loss to his stamina.

## Knockdown

The knockdown SA applies to the tail spin maneuver. With knockdown Garland's opponent will be knocked backward off of his feet (becoming prone), taking a 50% loss to his stamina.

## **Block Functions**

Garland's ironclaws are just as capable in blocking attacks as they are in dealing them.

#### **Cross Block**

With the cross block Garland crosses his arms over his chest creating a bladed shield. Any weapons, both melee and ranged will have a chance to be thwarted by this block. Moreover, freehand opponents and creatures will receive damage in addition to their thwarted attacks.

#### Catch

Relying heavily upon timing an enemy's attack, (melee weapons only) Garland can opt to catch the blow with the chains between his outstretched fingers. This is executed similarly to the Jab, only it must be anticipated perfectly for the weapon to be ensnared. Once caught Garland can then attempt to disarm his opponent, or outright break the weapon or appendage.

# Maneuverability

Garland's various movement mechanics are described below.

#### Crouch

Crouch is a standard action that allows for Garland to descend to the ground without losing his footing. Crouching makes Garland less detectable by other creatures and is harder to hit with ranged attacks, all of which are also dependent upon his surroundings. For instance, if Garland were in a clearing or open road the stealth effects of crouch would not apply. While in crouch mode Garland may move about freely, though at half speed. Crouch movement sends Garland crawling on all fours not unlike a crocodile.

"Crouch Chain"

- Crouch
  - Move = Crawl

#### Jump

Garland's standard straight jump. With this, Garland can greatly increase his reach for platforms, walls, and swings. Directional controls can also be applied to this jump for additional jump "Jump"

- Jump + jump = V-jump (high jump)
- Jump + direction = hop (short jump)
- Jump + direction + jump = leap (long jump)

#### Hurdle

Hurdle is an automatic in-game response to low rising barricades. The mechanic triggers an animation in which Garland places a hand upon the barricade and hoists his body entirely over to the other side. Such barricades must be lower than one meter in height and include fallen trees & stumps, rubble piles, rocks, and stones.

## Tumble

Tumble is a directional dodge utility that rolls Garland in any four directions and has the supplemental ability to knockdown an enemy in his path. If knockdown is successful Garland will have his opponent "pinned" to the ground by his claws. Garland can continue to hold his opponent down at the cost of stamina. While pinned, his opponent will steadily lose health unless successful in throwing Garland off.

"Tumble + enemy = Knockdown"

- Pin enemy
  - Hold (drain enemy health, but lose stamina)
  - Release/throw (end sequence)

Whenever garland lands from a jump he automatically softens the impact by tumbling. The intensity of the tumble is affected by the length/height of the parenting jump. In the event that Garland tumbles off of a ledge the player will have an opportunity to catch the shelf with his claws.

"Jump (parent mechanic)"

- Tumble (end sequence = life)
- Tumble + ledge
  - Fall (end sequence = death)
  - Latch
    - Fall (end sequence = death)
    - Swing back onto ledge (end sequence = life)

## Wall Jump

The wall jump is a diverse action that allows Garland to jump against, and push off a vertical surface to circumvent certain obstacles, such as small pits and single enemies.

"Wall Jump Chain"

- Fall (end sequence)
- Latch
  - Drop (same as fall, end sequence)
  - Climb (any direction)
  - Jump—upward (substitute for climb, continue from Latch)
  - Jump—backward (back flip long jump)
    - Downward jab (midair strike on grounded opponent)
    - Tumble (land in a roll, end sequence)

#### **Swing**

The swing mechanic can be applied to certain environmental objects "Swings" most commonly appearing in otherwise dead-ends. Swings are overhead objects usually depicted as fallen trees, creepers, roots, arches, or crossbeams. Swings can only be reached by vertical jumping.

"Swing Chain"

- Fall
- Latch
  - Drop
  - Swing
    - Flip up
      - Land on above platform
    - Propel = Throw yourself forward (jump over pit)
      - Jump = throw yourself forward (long jump over pit)

## Sprint

Sprinting increases Garland's movement rate by 50% at the cost of his stamina. Once depleted, he will slow to 50% normal rate for five/ten seconds while his stamina regenerates. Garland's speed gradually increases to 100% during this time.

## Climb

Garland can climb a variety of vertical surfaces such as rough stone walls, earthen walls, and large trees. Climbing is a simple mechanic requiring only a successful latch.

"Climb Chain"

- Latch
  - o Climb

#### Swim

Swimming comes as naturally to Garland as treading the dry land, possibly even more so. Whenever Garland enters water deeper than his waistline the swimming mechanics are triggered. Swim movement control mapping is the same as that of land, only the animations change. While swimming Garland's fluid body motion resembles a snake's, with his arms flat at his sides and legs together- never stroking or kicking. He can slither along the water's surface or dive down while remaining at normal (land) speed. Diving replaces the crouch mechanic while in water.

"Swim"

- Forward swim
- Backward swim
- Left strafe
- Right strafe
- Dive down
- Jump out