

TOON TROPICAL

QUICK START GUIDE

1. Install

1. Unity **6000.0 LTS** or newer, with **URP** or the **Built-in Render Pipeline**. The shaders contain a SubShader for each, so nothing needs converting.
2. Import the package. Everything lives in `Assets/ToonTropical/`.
3. Open a demo scene in `Demo/`: `Demo_TileIsland`, `Demo_HeroIsland`, `Demo_DigSite` or `Demo_SmallIsland`. Press Play, or just look at the Scene view: the water, wind and fire animate in edit mode too.
4. **Want to walk around?** Open `Demo_Explore` and press Play: you control the explorer on a roomy island with a camp, a village, a dock and a dig site (see section 5).

Upgrading from **Toon Tropical Lite**? Import this pack into the same project. It updates Lite in place, and your scenes keep working.

2. Using the assets

What's inside: 165 models: modular shore and cliff tiles, palms and plants, rocks, huts, docks, boats, camp gear, treasure and set dressing, plus an **archaeology dig site** (fossils, dig tools, a camp, ruins and dig pit tiles). Also 4 animated characters, 5 effects and a toon sky.

- Drag prefabs from `Prefabs/`. The base mesh casts and receives shadows.
- **Game-ready colliders:** terrain tiles, docks, stairs, the rope bridge, boats, the hut and the watchtower have exact MeshColliders, so characters can walk on and around them. Other props have a box over their footprint (up to 2 m tall), so flags, fronds and roofs never block a character and nothing can be climbed by accident. Plants and low clutter (under 0.45 m) have no collider, so characters walk through them. Add or swap colliders freely on your own prefab variants.
- **Ink outlines** are the `_Outline` child of each prefab. Disable it to turn outlines off on that object.
- The whole pack uses **two materials** (`M_Island_Palette`, `M_Island_Outline`) and **one 256 px palette texture**, with GPU instancing on. Scale is 1 unit = 1 m, and pivots are at the bottom center.

3. Environment: themes, time of day, wind

Add **Toon Tropical > TT Environment** to any scene; the demo scenes already have one. It finds its palettes automatically. If they're missing, use *Find Palettes* from the component's context menu.

Setting	What it does
Theme	Tropical, Autumn, Spooky or Winter. Re-colors every Toon Tropical material at once.
Time Of Day	Day, Sunset or Night. Swaps the palette, re-aims the assigned Sun, sets the camera backgrounds and scales the fire and lamp lights.
Wind	Direction, strength, frequency, flutter and gusts for palms, plants, grass, flags and the tent.

Animation clock	Drives the water, foam, flames and lamp glow. <i>Use Fixed Time</i> freezes them for screenshots.
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From a script (all pack scripts live in the `ToonTropical` namespace, so add `using ToonTropical;`):
`env.theme = TT_Environment.Theme.Winter; env.timeOfDay = TT_Environment.TimeOfDay.Night;`
`env.Apply();`

4. Modular terrain tiles

- Tiles are **2 × 2 m**; snap them on a 2 m grid with any 90° rotation. Water is at 0.40 m, sand at 0.47 m and the plateau at 1.47 m.
- Shore tiles**: Edge (A/B/C variants, interchangeable), Corner Outer, Corner Inner. **Cliff tiles**: Edge, Corner Outer, Corner Inner, Plateau, Ramp.
- Coastlines and cliffs only cross a tile edge at its midpoint, so any combination lines up. Keep cliffs at least one tile from the water.
- Dig Pit and Dig Trench replace any plain sand tile.
- The rope bridge comes in 2 m sections; finish each end with *Rope Bridge End*.

5. Characters

Prefab	Clips (all looping, in place)
SK_Island_Crab	Idle, Walk (sideways), Snap
SK_Island_Parrot	Idle, Fly, Squawk
SK_Island_Monkey	Idle, Walk, Cheer
SK_Island_Explorer	Idle, Walk, Dig, Wave

- Each prefab has an Animator controller with Idle as the default state and one **trigger per clip**:
`animator.SetTrigger("Walk");`
- TT Character Clip** plays a chosen clip with a start offset, so several copies don't move in sync.
- Clips have no root motion, so move the transform from your own controller.
- The explorer is a Humanoid rig**, so standard humanoid animations (Mixamo, Asset Store animation packs, Unity's Starter Assets controllers) retarget onto it. Swap the Animator controller or add your own clips. The crab, parrot and monkey use Generic rigs with their own clips.

Walk-around starter (Demo_Explore)

- Press Play in `Demo/Demo_Explore`: **WASD** walk, **Shift** run, **E** wave, **F** dig, **drag** to look around, **wheel** to zoom. **T** changes the theme, **N** the time of day, **H** hides the help panel. With the Input System package, a gamepad works too.
- TT Explorer Controller** (needs a CharacterController) walks a character relative to the camera, drives its Idle / Walk / Wave / Dig triggers and keeps it out of the water. **TT Follow Camera** orbits and follows it, moving in when something blocks the view. **TT Demo HUD** is the optional help panel.
- Interactive foliage**: add **TT Foliage Pusher** to any character and the grass, plants, bushes and flowers bend away as it walks through them, then spring back (up to 4 characters at once; set the radius per character). It works through the toon shader, so outlines and shadows bend too, in URP and Built-in.
- The scripts work with the Input System package or the old Input Manager, whichever your project uses. They are a starting point: swap in your own controller for a full game.

6. Using assets from other packs

Tools > Toon Tropical > Toonify Selection... gives models from other packs, or your own, the Toon Tropical look, so they sit naturally next to the pack's assets:

- **Toon materials:** each material becomes a copy using the Toon Tropical cel shader. It keeps the model's own texture and colour and follows the theme and time of day as a tint. Cutout foliage keeps alpha clipping and renders double-sided.
- **Ink outlines:** adds an `_Outline` child mesh, the same as the pack's prefabs. Width is relative to each object's size; skinned characters work too.
- Select objects in the scene, then click *Toonify*. Generated materials and outline meshes go to `Assets/ToonTropical_Generated`, and the originals are never modified. *Remove outlines* undoes the outline step.
- You can also set any material to the `ToonTropical/Toon` shader by hand and tick *Textured Mode*.

7. Sky and effects

- **Toon sky:** TT Environment's *Sky* field uses `M_Island_Sky`. It has a banded gradient, flat inked clouds, distant islands, a sun or moon and stars at night, all following the theme and time of day. Perspective cameras listed in *Cameras* show it; orthographic ones keep the flat backdrop colour. Untick *Use Sky* to turn it off.
- **Effect prefabs** in `Prefabs/FX`: `FX_Splash`, `FX_Dust` (one-shot: instantiate or call `Play()`), `FX_Sparkle`, `FX_Smoke`, `FX_Fireflies` (looping). They're flat cel shapes with an ink rim and dim with the time of day.

8. Performance tips

- Toon shader *Shadow Blur* (URP only): 0.08 m by default; set it to 0 on mobile.
- Shadows: about 4 cascades at 4096 and 50 m in a game. At a low resolution or long distance, toon shadow edges stair-step.
- Outlines double the triangle count. Disable the `_Outline` children on distant or LOD objects.
- The UI icons in `Icons/` are 512 px transparent PNGs of every asset.

9. Support

Toon Tropical is made by **Halfwatt Games**. Questions and requests: halfwattgames@gmail.com. Documentation and the playable web demo: halfwattgames.github.io/toon-tropical. If the pack helps your game, a review helps a lot.