

Entity Testing:

Garibaldi Fish:

1. Spawning the garibaldi fish in beach biome, should swim around.
2. Spawn fish in low water environment, should swim around, might hop.
3. Monitor fish movement activity, should swim around.
4. Monitor fish fins animation, should flap back and forth.
5. Check hitbox of fish, should correspond with shape of fish.
6. Check that it drops an item when killed (current item dropped is ink sacks)

Grey Whale:

1. Spawn whale in low and high water environment
2. Make sure surfaces for air on timely interval
3. Observe animations and make sure tail and flippers angle correctly

Colorful Six Armed Star:

1. Spawn entity in and out of water, check that it survives in either
2. Monitor movement activity, should stay low
3. Check hitbox for inconsistencies
4. Check that entity drops item when killed (currently item is ink sacks)

Dolphin:

1. Spawn in water environment
2. Make sure surfaces for air on timely interval
3. Observe animations and make sure tail angles correctly
4. Make sure dolphins travel in pods

Western Gull:

1. Check validity of flight pattern and that the entity flies in correct biome.
2. Ensure the gull switches from walking to flying normally.
3. Check for proper flying and walking animation of entity.
4. Spawn entity and check hitbox. Hitbox should correspond to the shape of the entity.
5. Ensure that entity will spawn in ocean and beach biomes.
6. Ensure that the entity gravitate toward a player who is holding fish.
7. Check that the entity will drop fish or feathers when it dies.
8. Check that the entity moves slower in water and lava.
9. Check that the entity drops cooked fish if it dies while on fire.

Elephant Seal (note 9, 10, and 11 are not applicable as the features were not implemented):

1. Attempt to spawn in ocean biome, it should fail to spawn.
2. Attempt to spawn in any biome other than beach, it should fail to spawn.
3. Attempt to spawn in beach biome but far from sand, it should fail to spawn.
4. Attempt to spawn in a beach biome above water, it should succeed.
5. Attempt to spawn in a beach biome in water, it should succeed.
6. Spawn entity and then enter F3 + B to see its hitbox. It should be sized appropriately for the entity.
7. Spawn the entity and observe its swimming in the water. It should occasionally randomly swim around with minimal snagging on other blocks.
8. Spawn entity in beach biome in the water near the border of another biome, the entity should not travel out of the biome too far before returning. Run repeatedly to ensure behavior matches. Also check logged statements to verify return behavior is being executed.
9. Spawn entity and observe it (turn on nightvision). Eventually it should return to the dry sand of a beach.
10. Spawn entity and delete its home sand location (check log to locate / use tnt to destroy easily). When it tries to return to beach it should find a new spot on the beach. Verify via logged information and visual watch the seal beach.
11. Spawn entity and delete its home sand location (check log to locate / use tnt to destroy easily). Also destroy all nearby sand. When it tries to return to beach it should try to find a new spot on the beach but fail and therefore not expect that AI procedure. Verify via logged information and visual watch the seal beach.