#### 1.0 Introduction

The information in this document comes from a combination of in-game testing, the New Horizons Companion Guide, the game's datamined eventflow, and Ninji's datamine. The Guide explains that the island's rating is based on two separate categories of points. One is based mostly on the buildings, structures, and furniture on the island and the other is based mostly on the plant-life on the island. In the Guide, they are called "Development" and "Scenery" and in the game's files they are called "Life" and "Natural". In-game, when the island does not have enough development, Isabelle will suggest the player adds more "Scenery" to the island and when the island has enough development but not enough plant-life, she will suggest the player plants more "Nature". In this document, we will call them "Development" and "Nature". The Guide provides a breakdown of how many points in each are needed to reach each rating and that information is provided in the table below. Testing consists of finding the exact point at which the island reaches a new rating and adding and removing components to measure and compare their values against each other.

#### 2.0 Nature Points

Nature points are calculated by the quantity of Trees, Bamboo, Bushes, Flowers, and DIY Furniture on the island. As stated in the Guide (except for Bushes) and confirmed by Ninji's datamine, fully-grown Trees, fully-grown Bamboo, and fully-grown Flowers are worth 1 nature point each. Stage 1 Flowers (Seeds), however, are worth 0.5 nature points each and Stage 2 and 3 Flowers (Stems and Buds) are worth 0.7 nature points each. Ninji's datamine found that fully-grown Bushes are worth 0.5 nature points each. Trees, Bamboo, and Bushes do not provide any points before being fully-grown.

The Guide states that DIY Furniture **only** provides nature points, which is false. According to Ninji's datamine, all DIY Furniture is worth 0.25 nature points each and if the DIY Furniture is at least 3 squares wide, they are worth an additional 0.75 nature points. That means that all DIY Furniture that are size 3x1, 3x2, or 3x3 are worth a total of 1 nature point.

Aside from how the points are calculated, there are various point and rating caps related to nature point items. According to Ninji's datamine, Trees, Bamboo, and Bushes cannot give more than a combined total of 190 nature points. In addition, it is shown in the game's eventflow that the rating cannot be higher than 4 Stars if there are 220 Trees/Bamboo or more, in any growth stage, including saplings and stumps. It is also known that Isabelle tells the player that they have too many Trees at this point. Isabelle will also stop recommending planting trees once there are 180 or more at any stage.

## 3.0 Development Points

Development points are calculated from the buildings, structures, and furniture placed on the island. As stated in the Guide and confirmed by Ninji's datamine, the Museum, Able Sisters, the

upgraded Nook's Cranny, Bridges, and Inclines are all worth 15 development points each. Note that there cannot be more than 8 Bridges and 8 Inclines on an island. Despite Isabelle telling the player to build Fences when there is a lack of development points, Fences are shown in the Guide and Ninji's datamine to be only worth 0.2 points each and this has been confirmed by our tests. Isabelle has a 10% chance each of recommending upgrading the Museum from a tent, upgrading Nook's Cranny, and building Able Sisters until they are respectively complete. She also has a 10% chance of recommending building bridges and inclines until you have 3 bridges.

#### 3.1 Weeds

Also provided by Ninji's datamine is how weeds factor into development points. With 100 weeds or less, there is zero penalty and the island receives 30 development points. However, starting at 101 weeds, this point bonus is slowly reduced per weed and the new point bonus is found using the formula [(1000 - W) / 30]. This means that after 100 weeds, every 3 weeds are a 0.1 development point penalty and every 30 weeds are a 1 point penalty. At 1000 weeds or more, the point bonus is zero. Due to being the smallest change in development points in the game, weeds are useful for testing.

## 3.2 Villagers

Neglected by the Guide, both Ninji's datamine and the game's eventflow provide details about development points in relation to animal villagers. At 8 villagers, there is no development point bonus. At 9, there is a bonus of 15 development points and at 10, there is an additional bonus of 15 development points, making a total bonus of 30 points for having 10 villagers. However, with 6 or less villagers, the rating cannot be higher than 1 Star. With 7 villagers, what would otherwise be a 2 Star rating drops to 1 Star, and what would otherwise be a 3, 4, or 5 Star rating becomes a 2 Star rating.

#### 3.3 Furniture

The effects of Furniture on development points in this section are backed up by testing unless stated otherwise. **All placed items** are worth a minimum of 1 development point. This includes Housewares, Miscellaneous, **all** Clothing, Tools, K.K. Slider Songs, Fish, Bugs, Fossils, Artwork, and fake Artwork. The only exception is that Wall-mounted items placed on the player's door **do not affect** points. Items that are labeled for "outdoors" have an additional 0.5 point bonus.

Items that have a buying price of **2000 bells or more** have an additional 1 point and items that have a buying price of **20,000 bells or more** have another additional 1 point. This means that a placed item worth exactly 20,000 bells is worth a minimum of 3 points based on its price alone. Keep in mind that items have an internal buy price in the game's files regardless if they are actually buyable or not, likely because they are sellable and selling price is 25% of the buying price.

The Guide suggests that the size of Furniture only factors in for DIY Furniture, but this is not true. Furniture that is at least 3 squares wide (3x1, 3x2, and 3x3) provide an additional 3 development points. Combining all these factors, the highest amount of development points that a piece of Furniture can be worth is 6.5 points.

## 3.3.1 Furniture Variety

According to the Guide, there is a point penalty for having too many "types" of Furniture in the same 8x8 map block. The map is a 96 x 96 grid, meaning that it is split into 144 predefined blocks containing 64 squares. Also according to the Guide, one block is 1/4th of the grid squares seen on the in-game map app. The Guide states that there is a 0.5 point penalty per same type of furniture in a block starting at 5 unique types and a 0.75 point penalty per same type starting at 10 unique types. The Guide uses "Wooden chair" and "Office chair" as an example of two different pieces of Furniture of the same type. However, this could not be replicated in any tests. After testing, all of this was found to be very wrong.

In testing, it was found that the amount of unique types is **not** what is counted. If there are at least 6 of the **same exact** item in a block, then **all duplicates** in that block are penalized. Note that different colors and customizations are considered unique and all Sable patterns and custom patterns are also considered unique, even if they are the **same exact pattern**. Also note that duplicates are not penalized unless a single item is placed at least 6 times in the block, meaning that there is no way to be penalized for having 5 or less of any identical item on the island. However, once a block has an identical item 6 times, all duplicates in the block receive a penalty, even another item that is placed just 2 or more times. The first copy of the item maintains its full point value, but every additional copy is reduced in points. At 6 or more of the same item in the block, all extra copies of any item lose 0.5 points each. At 11 or more of the same item in the block, extra copies of any item lose 0.75 points each.

In addition to this, the Guide also states that 10 or more types of DIY Furniture in the same block provides a 0.75 nature point bonus per type. This has yet to be verified by either testing or datamining.

## 4.0 Other Rating Caps

When there are **15 or more** items dropped on the ground but not on top of furniture (as of at least 1.5.0), not placed, the rating cannot be higher than 4 Stars. Tree branches, Stones, Sea Shells, Star Fragments, Mushrooms, and Message Bottles do not count, even if dropped by a player.

In addition, if there are **45 or more** items placed in any single 8x8 block, meaning that 45 out of the 64 blocks are occupied by a placed item, the rating cannot be higher than 4 Stars.

### **5.0 Unknown Factors**

There may still be unknown factors that affect the Island Evaluation. It is more likely that there are undiscovered points penalties because our tests are currently coming up a few points too high than they should.

# **6.0 Points Table**

	Development Points	Nature Points
2 Stars	80+	200+
3 Stars	160+	270+
4 Stars	400+	350+
5 Stars	665+	450+

	Development Points	Nature Points
Museum	15	
Able Sister's	15	
Upgraded Nook's Cranny	15	
Bridges and Inclines	15	
9 Villagers	15	
10 Villagers	30	
100 Weeds or Less	30	
More than 100 Weeds	(1000 - Weeds) / 30	
Fences	0.2	
Furniture or Item Placed	1	
2k Price Bonus	1	
20k Price Bonus	1	
Outdoor Bonus	0.5	
Size 3 Bonus	3	
DIY Bonus		0.25
Size 3 DIY Bonus		0.75
Fully-grown Trees/Bamboo		1

Fully-grown Flowers	1
Flower Stems/Buds	0.7
Flower Seeds	0.5
Bushes	0.5
Small Pumpkin Sprouts	0.5
Medium-Ripe Pumpkins	1

# 7.0 Contact Information

If you would like to discuss Island Evaluation or have any helpful information from testing or datamining, feel free to contact us on Discord and we would appreciate it.

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