

# Stardew Valley: Technical Reference and Mechanics Compendium

## 1. System Architecture and Core Simulation Mechanics

Stardew Valley operates as a sophisticated stochastic simulation of rural economic and social systems. This document serves as a comprehensive technical repository for the game's entities, mechanics, and data structures, aggregating all available datasets to support Retrieval-Augmented Generation (RAG) models. The simulation is governed by interaction loops involving time management, energy expenditure, and probabilistic resource generation.

### 1.1 Temporal and Environmental Control

The simulation runs on a strict calendar system divided into four seasons: Spring, Summer, Fall, and Winter. Each season consists of exactly 28 days. Temporal progression dictates the lifecycle of biological entities (crops, fish, forage) and the scheduling of social events (festivals, NPC routines).

Seasonality and Phase Shifts:

The transition between seasons (e.g., Spring 28 to Summer 1) triggers a massive state change in the game world. Most agricultural vegetation (crops) that is not designated as "multi-season" will wither and die immediately upon this transition.<sup>1</sup> This necessitates precise harvest planning using the formula for growth duration:

$$GrowthDays = DaysToMaturity + ((MaxHarvests - 1) \times DaysToRegrow)$$

This calculation is critical for multi-harvest crops to ensure return on investment before the seasonal cutoff.<sup>1</sup>

### 1.2 User Interface and Debugging Protocols

For advanced user control and testing, the simulation supports a console command interface, primarily accessible via modding layers (SMAPI) but referenced in the core data structures. These commands allow for direct manipulation of game states and entity spawning.

**Command Syntax and Functionality:**

- **State Manipulation:** Commands such as `/pause` freeze the game state and all character actors, applicable in multiplayer contexts to synchronize player pauses.<sup>2</sup>
- **Visual Output:** The command `/mapsscreenshot` captures the entire current location's raster data to a file, useful for mapping layout analysis.<sup>2</sup>
- **Chat and Expression:** The `/color <color>` command modifies the user's chat text hue.

Supported parameters include predefined values like jade, pink, plum, and jungle.<sup>2</sup> Emotes are triggered via /emote <emote\_id>, with hidden emotes like jar, music, and taunt requiring manual syntax input as they are absent from the default UI.<sup>3</sup>

- **Debug & Data Analysis:** Advanced commands include debug <command> for executing internal logic, show\_data\_files to open the directory containing XML/JSON data, and regenerate\_bundles to reset the Community Center data structure, which risks corrupting save states if used improperly.<sup>4</sup> The whereis debug command locates event actors within the coordinate system.<sup>5</sup>

## 2. Agronomic Systems: Crop Cultivation and Phenology

Agriculture constitutes the primary economic engine of the simulation. The system is defined by seed acquisition costs, growth phases (measured in days), and yield values.

### 2.1 Growth Logic and Modifiers

Crop growth is deterministic but modifiable. The application of fertilizers alters specific variables:

- **Speed-Gro:** This fertilizer theoretically increases growth rates by 10%. However, the internal logic reduces the days per growth stage by a fixed amount. Because this reduction is rounded and applied per stage, the actual temporal reduction often falls short of the advertised percentage, specifically affecting earlier stages disproportionately. It does not reduce the duration between harvests for multi-harvest crops.<sup>6</sup>
- **Quality Modifiers:** Fertilizers like Basic and Quality Fertilizer increase the probability of harvesting Silver, Gold, or Iridium quality produce. For multi-harvest crops (e.g., Cranberries, Blueberries), this quality modifier applies *only* to the first item yielded per harvest cycle; subsequent items in the same harvest are standard quality.<sup>1</sup>

### 2.2 Seasonal Crop Database

The following data tables synthesize seed costs (General Store vs. JojaMart), growth duration, and economic yields.

#### Spring Crops

Spring flora is characterized by moderate growth cycles. **Strawberries** are a statistical outlier, available only via the Egg Festival, offering high regrowth potential.

Crop Entity	Seed Cost (Pierre/Joja)	Growth (Days)	Sell Value (Base/Silver/Gold/Iridium)	Energy / Health	Technical Notes
Blue Jazz	30g / 37g	7	50g / 62g / 75g / 100g	45 / 20	Essential for "Lucky Lunch"

					recipe. <sup>1</sup>
<b>Cauliflower</b>	80g / 100g	12	175g / 218g / 262g / 350g	75 / 33	Potential for Giant Crop mutation (1% chance in 3x3 grid). <sup>1</sup>
<b>Garlic</b>	40g / N/A	4	60g / 75g / 90g / 120g	N/A	Available Year 2+. Adds zest to dishes. <sup>1</sup>
<b>Kale</b>	70g / N/A	6	N/A	N/A	Harvested via Scythe. <sup>7</sup>
<b>Potato</b>	50g / N/A	6	80g	N/A	20% chance to spawn secondary yield (25% effectively). <sup>1</sup>
<b>Strawberry</b>	100g (Festival)	8	120g / 150g / 180g / 240g	N/A	Regrows every 4 days. <sup>1</sup>
<b>Carrot</b>	N/A (Forage/Dig)	3	35g / 43g / 52g / 70g	75 / 33	High-speed tuber. <sup>1</sup>
<b>Green Bean</b>	60g / 75g	10	40g / 50g / 60g / 80g	N/A	Trellis collider blocks movement. Regrows every 3 days. <sup>1</sup>
<b>Tulip</b>	20g / 25g	6	30g	45 / 20	. <sup>1</sup>
<b>Unmilled Rice</b>	40g	6	30g	N/A	Harvested via Scythe. Growth accelerated near water. <sup>1</sup>

## Summer Crops

Summer flora emphasizes high-yield, repeating harvest mechanics.

Crop Entity	Seed Cost (Pierre/Joja)	Growth (Days)	Sell Value (Base)	Technical Notes
<b>Starfruit</b>	400g (Oasis)	13	750g	Highest single-harvest base value.. <sup>8</sup>
<b>Blueberry</b>	80g	13	50g (per berry)	Yields multiple berries. Regrows

				every 4 days. <sup>1</sup>
<b>Hops</b>	60g	11	25g	Trellis crop. Regrows daily. High processing utility (Pale Ale). <sup>1</sup>
<b>Hot Pepper</b>	40g	5	40g	Regrows every 3 days.. <sup>1</sup>
<b>Melon</b>	80g	12	250g	Potential for Giant Crop mutation. <sup>1</sup>
<b>Radish</b>	40g / 50g	6	90g	. <sup>1</sup>
<b>Poppy</b>	100g / 125g	7	140g	Universally hated gift (Exception: Penny). <sup>1</sup>
<b>Summer Spangle</b>	50g	8	90g	. <sup>8</sup>
<b>Sunflower</b>	200g / 125g	8	80g	Drops seeds on harvest. Multi-season (Summer/Fall). <sup>1</sup>
<b>Red Cabbage</b>	100g	9	260g	Available Year 2+.. <sup>8</sup>
<b>Summer Squash</b>	N/A (Dig/Loot)	6	45g	Regrows every 3 days. <sup>1</sup>
<b>Wheat</b>	10g / 12g	4	25g	Multi-season (Summer/Fall). Scythe harvest. <sup>1</sup>
<b>Corn</b>	150g	14	50g	Multi-season (Summer/Fall). Regrows every 4 days. <sup>1</sup>

## Fall Crops

Fall flora includes high-value vegetables and specific artisan-focused crops.

Crop Entity	Seed Cost (Pierre/Joja)	Growth (Days)	Sell Value (Base)	Technical Notes
<b>Pumpkin</b>	100g	13	320g	Potential for Giant Crop mutation. <sup>1</sup>
<b>Cranberries</b>	240g	7	75g (x2)	Yields 2 berries minimum. Regrows every 5 days. <sup>1</sup>

<b>Amaranth</b>	70g / 87g	7	150g	Scythe harvest. <sup>1</sup>
<b>Artichoke</b>	30g	8	160g	Available Year 2+. <sup>1</sup>
<b>Beet</b>	20g (Oasis)	6	100g	. <sup>1</sup>
<b>Bok Choy</b>	50g	4	80g	. <sup>1</sup>
<b>Eggplant</b>	20g	5	60g	Regrows every 5 days. <sup>1</sup>
<b>Fairy Rose</b>	200g	12	290g	. <sup>1</sup>
<b>Grape</b>	60g	10	80g	Trellis crop. Regrows every 3 days. <sup>1</sup>
<b>Yam</b>	60g	10	160g	. <sup>1</sup>

### Special and Hybrid Crops

Certain biological entities operate outside standard seed distribution networks.

- **Ancient Fruit:** Multi-season (Spring/Summer/Fall). 28-day maturation, 7-day regrowth. Derived from Ancient Seed artifact.<sup>1</sup>
- **Coffee Bean:** Multi-season (Spring/Summer). 10-day maturation, 2-day regrowth. Yields 4 beans per harvest (2% chance for more). Can be processed in Kegs.<sup>1</sup>
- **Sweet Gem Berry:** Fall only. Grown from Rare Seed (Traveling Cart). 24 days to mature. High value, inedible.<sup>9</sup>
- **Qi Fruit:** Associated with Mr. Qi's special orders. Can mutate into Giant Crops. Persists only during the quest.<sup>1</sup>
- **Fiber:** Grown from Fiber Seeds (Crafted). 7-day growth, all seasons, requires no water.<sup>10</sup>

## 3. Ichthyological Simulation: Fishing Dynamics

The fishing subsystem relies on a location-based RNG seed influenced by season, weather, and time of day. The core mechanic involves a mini-game where success is determined by the fish's "difficulty" rating and movement "behavior" (e.g., Sinker, Floater, Dart).

### 3.1 Catch Mechanics and Optimization

- **Bobber Position:** Casting distance is a primary variable. Casting further from land (and specifically into deep water) improves fish quality (Silver/Gold/Iridium) and the probability of hooking rare species. Casting into "bubbles" increases bite rate and quality metrics.<sup>11</sup>
- **Perfect Catch:** Completing the mini-game without the fish leaving the capture bar triggers a "Perfect" state, awarding a 2.4x experience multiplier and incrementing the fish quality tier (Silver  $\rightarrow$  Gold).<sup>12</sup>
- **Experience (XP):** XP gain is calculated based on fish difficulty and quality. For example, a regular Sunfish yields 13 XP, while an Iridium quality one yields 25 XP.<sup>13</sup>

## 3.2 Comprehensive Fish Database

The following table aggregates data for species found in standard hydrological zones.

Species	Biome	Season	Time	Weather	Diff	Behavior
Pufferfish	Ocean	Summer	12pm-4pm	Sun	80	Floater <sup>12</sup>
Anchovy	Ocean	Sp, Fa	Any	Any	30	Dart <sup>12</sup>
Tuna	Ocean	Su, Wi	6am-7pm	Any	70	Smooth <sup>12</sup>
Sardine	Ocean	Sp, Fa, Wi	6am-7pm	Any	30	Dart <sup>12</sup>
Bream	River	All	6pm-2am	Any	35	Smooth <sup>12</sup>
Largemouth Bass	Lake	All	6am-7pm	Any	50	Mixed <sup>12</sup>
Smallmouth Bass	River/Pond	Sp, Fa	Any	Any	28	Mixed <sup>12</sup>
Rainbow Trout	River/Lake	Summer	6am-7pm	Sun	45	Mixed <sup>12</sup>
Salmon	River	Fall	6am-7pm	Any	50	Mixed <sup>14</sup>
Walleye	River/Lake	Fa, Wi	12pm-2am	Rain	45	Smooth <sup>12</sup>
Perch	River/Lake	Winter	Any	Any	35	Dart <sup>12</sup>
Sunfish	River	Sp, Su	6am-7pm	Sun	30	Mixed <sup>13</sup>
Catfish	River	Sp, Fa	6am-12am	Rain	75	Mixed <sup>9</sup>
Shad	River	Sp, Su, Fa	9am-2am	Rain	45	Smooth <sup>9</sup>
Tiger Trout	River	Fa, Wi	6am-7pm	Any	60	Dart <sup>9</sup>
Carp	Lake/Sewers	Sp, Su, Fa	Any	Any	15	Mixed <sup>11</sup>
Sturgeon	Lake	Su, Wi	6am-7pm	Any	78	Mixed <sup>9</sup>
Ghostfish	Mines (20/60)	All	Any	Any	50	Mixed <sup>9</sup>
Sandfish	Desert	All	6am-8pm	Any	65	Mixed <sup>9</sup>
Woodskip	Secret Woods	All	Any	Any	50	Mixed <sup>9</sup>
Void Salmon	Witch's Swamp	All	Any	Any	80	Mixed <sup>14</sup>

## 3.3 Legendary Fish Classification

These unique entities appear only under strict conditions and possess extreme difficulty ratings.

1. **Crimsonfish:** Summer, Beach (East Pier), Any Weather. Requires Fishing Level 5. Difficulty 95.<sup>12</sup>
2. **Angler:** Fall, River (North of JojaMart), Any Weather. Requires Fishing Level 3. Difficulty 85.<sup>12</sup>

3. **Legend:** Spring, Lake (Near Log), Rain. Requires Fishing Level 10. Difficulty 110.<sup>12</sup>
4. **Glacierfish:** Winter, Cindersap Forest (Arrowhead Island), Any Weather. Difficulty 100.<sup>12</sup>
5. **Mutant Carp:** The Sewers, Any Time. Difficulty 80.<sup>12</sup>
6. **Legendary Fish II:** During the "Extended Family" quest, offspring of the original legendary fish appear in the same locations with identical difficulty.<sup>12</sup>

## 4. Subterranean Systems: Mining, Geology, and Combat

The game features three primary procedurally generated dungeon environments: The Mines, Skull Cavern, and the Volcano Dungeon. Each operates with distinct logic regarding floor layouts, monster spawns, and resource nodes.

### 4.1 Geodes and Mineral Extraction

Geodes function as loot boxes with fixed probability distributions for their contents. They must be processed by the Blacksmith or a Geode Crusher.

- **Geode:** 1/12 chance each for Copper Ore, Iron Ore, Coal. 1/16 chance for Clay.<sup>15</sup> Note: Iron Ore drops only after Mine Level 26.
- **Frozen Geode:** 1/16 chance for Gold Ore (After Mine Level 76), Copper, Iron, Coal. Contains Refined Quartz.<sup>16</sup>
- **Omni Geode:** The most versatile container, found in Mines (21+), Skull Cavern, and Volcano. Sources include Carbon Ghosts (99% drop) and Octopus Fish Ponds.<sup>17</sup>

### 4.2 Monster Database and Combat Stats

Combat entities are defined by Health Points (HP), Base Damage, Defense, and Loot Tables.  
**The Mines (Pelican Town)**

- **Floors 1-39:**
  - **Green Slime:** HP 24, Dmg 5. Drops Slime, Sap, Amethyst.<sup>18</sup>
  - **Bug:** HP 1, Dmg 8. Flight path is fixed. Drops Bug Meat (76%).<sup>18</sup>
  - **Duggy:** HP 40, Dmg 6. Burrows in dirt. Drops Cherry Bomb, Earth Crystal.<sup>18</sup>
  - **Rock Crab:** HP 30, Dmg 5. Disguises as stone. Drops Crab, Cherry Bomb.<sup>18</sup>
  - **Grub:** HP 20, Dmg 4. Pupates into Cave Fly if not killed quickly.<sup>18</sup>
  - **Cave Fly:** HP 22, Dmg 6. Fast flyer.<sup>18</sup>
- **Floors 40-79 (Frozen):**
  - **Dust Sprite:** HP 40, Dmg 6. High Coal drop rate (50%). Essential for Burglar's Ring goal.<sup>18</sup>
  - **Frost Bat:** HP 36, Dmg 7. Drops Bat Wings.<sup>18</sup>
  - **Ghost:** HP 96, Dmg 10. High evasion/knockback. Drops Solar Essence, Gold Ore.<sup>18</sup>
  - **Skeleton:** HP 140, Dmg 10. Ranged bone attack. Drops Bone Fragment.<sup>18</sup>
- **Floors 80-120 (Lava):**

- **Red Slime:** HP 205, Dmg 16. Drops Coal, White Algae.<sup>18</sup>
- **Lava Bat:** HP 80, Dmg 15. Drops Bat Wings.<sup>18</sup>
- **Shadow Brute:** HP 160, Dmg 18. Drops Void Essence (75%).<sup>18</sup>
- **Shadow Shaman:** HP 80, Dmg 17. Heals allies. Inflicts "Jinxed" debuff. Drops Void Essence.<sup>18</sup>
- **Metal Head:** HP 40, Dmg 15. High Defense (8). Drops Solar Essence.<sup>18</sup>
- **Squid Kid:** HP 1, Dmg 18. Shoots fireballs. Drops Solar Essence, Squid Ink.<sup>18</sup>

### Skull Cavern (Calico Desert)

Difficulty scales indefinitely. Monsters here have significantly inflated stats.

- **Armored Bug:** HP 1, Dmg 8. Invulnerable unless weapon has "Bug Killer" enchantment.<sup>18</sup>
- **Serpent:** HP 150, Dmg 23. High speed. Drops Spicy Eel, Bombs, Rabbit's Foot.<sup>18</sup>
- **Mummy:** HP 260, Dmg 30. Collapses on death; requires explosion (Bomb) to permanently kill. Drops Cloth, Solar Essence.<sup>18</sup>
- **Iridium Bat:** HP 300, Dmg 30. Drops Iridium Ore, Batteries, Energy Tonic.<sup>18</sup>
- **Pepper Rex:** HP 300, Dmg 15. Prehistoric floors. Drops Dinosaur Egg, Bones.<sup>18</sup>
- **Iridium Crab:** HP 240, Dmg 15. Disguises as Iridium Node. Drops Iridium Ore, Crab Cakes.<sup>18</sup>
- **Carbon Ghost:** HP 190, Dmg 25. Drops Omni Geodes.<sup>18</sup>

### Volcano Dungeon (Ginger Island)

- **Magma Sprite:** HP 220, Dmg 15. Flying. Drops Cinder Shards.<sup>18</sup>
- **Magma Sparker:** HP 310, Dmg 15. Stronger sprite. Inflicts "Burnt" debuff.<sup>18</sup>
- **Lava Lurk:** HP 220, Dmg 15. Swims in lava, shoots fireballs. Drops Dragon Tooth.<sup>18</sup>
- **False Magma Cap:** HP 290, Dmg 15. Disguises as forage mushroom.<sup>18</sup>
- **Dwarvish Sentry:** HP 300, Dmg 18. Immune to knockback.<sup>18</sup>

## 4.3 Weaponry Specifications

Weapons are classified by type (Sword, Dagger, Club) and level.

- **Galaxy Sword:** Level 13. Dmg 60-80. Speed +4. Obtained via the Three Pillars puzzle in the Desert using a Prismatic Shard.<sup>19</sup>
- **Infinity Blade:** Level 17. Dmg 80-100. Speed +4, Def +2. Crafted at the Forge (Galaxy Sword + 3 Galaxy Souls).<sup>21</sup>
- **Lava Katana:** Level 10. Dmg 55-64. Crit Power +25. Bought at Adventurer's Guild.<sup>19</sup>
- **Obsidian Edge:** Level 6. Dmg 30-45. Mine Floor 90 reward.<sup>19</sup>
- **Master Slingshot:** Dmg 2x base slingshot. Uses ammo (Ore, Wood, Stone).<sup>19</sup>

## 5. Progression Architecture: Bundles and Community Restoration

The primary narrative objective involves restoring the Community Center. This is achieved either through "Bundles" (item donations) or the "Joja Warehouse" (monetary purchase).

## 5.1 Standard Bundles (Community Center)

- **Crafts Room:** Rewards Bridge Repair (Quarry access). Requires seasonal forage (Spring, Summer, Fall, Winter), Construction resources (Wood, Stone, Hardwood), and Exotic forage (Coconut, Cactus, Mushrooms).<sup>9</sup>
- **Pantry:** Rewards Greenhouse. Requires Crops (Spring, Summer, Fall), Quality Crops (Gold star), Animal Products (Milk, Eggs, Wool), and Artisan Goods (Cheese, Jelly, Honey, Cloth, Truffle Oil).<sup>9</sup>
- **Fish Tank:** Rewards Glittering Boulder Removal (Panning). Requires River, Lake, Ocean, and Night fish, plus Crab Pot items and Specialty fish (Pufferfish, Sandfish, Ghostfish).<sup>9</sup>
- **Boiler Room:** Rewards Minecarts. Requires Blacksmith items (Bars), Geologist items (Quartz, Frozen Tear), and Adventurer items (Monster loot).<sup>9</sup>
- **Bulletin Board:** Rewards Friendship. Requires Chef, Dye, Field Research, Fodder, and Enchanter bundles.<sup>9</sup>
- **Vault:** Rewards Bus Repair. Requires cash donations totaling 42,500g.<sup>9</sup>

## 5.2 Remixed Bundles Logic

The game allows for "Remixed Bundles" at the start, introducing variability.

- **Crafts Room Variants:** "Sticky Bundle" (500 Sap) or "Forest Bundle" (Moss, Fiber, Seeds) may replace Construction.<sup>22</sup> "Wild Medicine" (Purple Mushroom, Fiddlehead Fern) may replace Exotic Foraging.<sup>22</sup>
- **Pantry Variants:** "Fish Farmer's Bundle" (Roe, Squid Ink) or "Garden Bundle" (Flowers) may replace standard options.<sup>22</sup>
- **Fish Tank Variants:** "Master Fisher's Bundle" (Lava Eel, Scorpion Carp, Octopus, Blobfish) offers a high-difficulty challenge.<sup>22</sup>

## 5.3 The Joja Warehouse Alternative

Purchasing a Joja Membership (5,000g) replaces bundles with direct purchases via the **Joja Community Development Form** <sup>23</sup>:

- Minecarts: 15,000g
- Panning: 20,000g
- Bridge: 25,000g
- Greenhouse: 35,000g
- Bus: 40,000g

## 5.4 Grandpa's Evaluation Scoring

At the start of Year 3, a scoring system determines the number of candles lit at Grandpa's Shrine (0-4). 12 points are required for the **Statue of Perfection** (Iridium ore generator).<sup>25</sup>

- **Financials:** 50k (1pt), 100k (1pt), 200k (1pt), 300k (1pt), 500k (1pt), 1M (2pts). Total: 7

pts.

- **Skills:** 30 Levels total (1pt), 50 Levels total (1pt).
- **Achievements:** Complete Museum (1pt), Master Angler (1pt), Full Shipment (1pt).
- **Social:** Married + House Upgrades (1pt), 8+ Hearts with 5 Villagers (1pt), 10 Villagers (1pt), Pet Friendship (1pt).
- **Keys:** Skull Key (1pt), Rusty Key (1pt).
- **Community Center:** Completion (1pt), Ceremony (2pts). *Note: Joja route forfeits the Ceremony points.*

## 6. Social Engineering: Gift Logic and Festivals

NPC relationships are quantified by a 250-point "Heart" system. Points are accrued via dialogue (+10/20) and gifting.

### 6.1 Gifting Matrix

Gifts are classified as Love (+80), Like (+45), Neutral (+20), Dislike (-20), or Hate (-40).

- **Universal Loves:** Golden Pumpkin, Magic Rock Candy, Pearl, Prismatic Shard, Rabbit's Foot, Stardrop Tea.<sup>26</sup>
- **Birthday Logic:** Gifts given on an NPC's birthday apply an **8x multiplier** to the point value.<sup>27</sup>

#### Select NPC Preferences:

- **Abigail (Fall 13):** Loves Amethyst, Pufferfish, Chocolate Cake, Spicy Eel.<sup>28</sup>
- **Alex (Summer 13):** Loves Complete Breakfast, Salmon Dinner.<sup>28</sup>
- **Elliott (Fall 05):** Loves Crab Cakes, Duck Feather, Pomegranate.<sup>28</sup>
- **Harvey (Winter 14):** Loves Coffee, Wine, Truffle Oil.<sup>28</sup>
- **Marnie (Fall 18):** Loves Diamond, Pink Cake, Farmer's Lunch.<sup>26</sup>
- **Penny (Fall 02):** Loves Melon, Poppy, Sandfish, Emerald.<sup>26</sup>
- **Sebastian (Winter 10):** Loves Frozen Tear, Sashimi, Void Egg.<sup>28</sup>

### 6.2 Festival Scripts

Festivals pause the game clock and offer unique interactions.

- **Egg Festival (Spring 13):** Features the Egg Hunt. Strawberry Seeds (100g) are sold here. Hunt strategy: Collect 9+ eggs to beat Abigail.<sup>29</sup>
- **Flower Dance (Spring 24):** Dancing with a partner grants +250 friendship (1 heart). Requires 4 hearts with the partner.<sup>29</sup>
- **Luau (Summer 11):** Potluck soup evaluation. Best items (Gold/Iridium Cauliflower, Truffle, Starfruit) yield +120 friendship with the whole town.<sup>29</sup>
- **Trout Derby (Summer 20-21):** Fishing event in Cindersap Forest. Catch Rainbow Trout for Golden Tags to trade for prizes.<sup>29</sup>
- **Stardew Valley Fair (Fall 16):** Grange Display contest. Score depends on item quality/variety. Star Tokens purchase the Stardrop (2,000 tokens).<sup>29</sup>
- **Spirit's Eve (Fall 27):** Maze navigation. Prize: Golden Pumpkin (Odd years) or Prize

Ticket (Even years).<sup>29</sup>

- **Festival of Ice (Winter 8):** Ice fishing contest. Win by catching 5+ fish.<sup>29</sup>
- **SquidFest (Winter 12-13):** Catch squids for tiered rewards (Iridium tier requires 8/10 squids).<sup>29</sup>
- **Night Market (Winter 15-17):** Deep-sea fishing submarine (Blobfish, Midnight Squid). Magic Shop Boat sells Rarecrows.<sup>29</sup>
- **Feast of the Winter Star (Winter 25):** Secret Gift exchange (5x friendship value).<sup>29</sup>

## 7. Domestic Engineering: Cooking and Crafting

### 7.1 Culinary Science

Cooking requires the Farmhouse Kitchen. Food provides energy, health, and status buffs. Only one food buff can be active at a time (Drink buffs stack separately).<sup>30</sup>

- **Complete Breakfast:** +2 Farming, +50 Max Energy. (Fried Egg, Milk, Hashbrowns, Pancakes).<sup>30</sup>
- **Lucky Lunch:** +3 Luck. (Sea Cucumber, Tortilla, Blue Jazz).<sup>30</sup>
- **Spicy Eel:** +1 Luck, +1 Speed. (Eel, Hot Pepper).<sup>30</sup>
- **Seafoam Pudding:** +4 Fishing. (Flounder, Midnight Carp, Squid Ink).<sup>30</sup>
- **Triple Shot Espresso:** +1 Speed. (3 Coffee).<sup>30</sup>
- **Qi Seasoning:** Upgrades food to Gold quality (+80% stats, +1 buff level, +50% value).<sup>30</sup>

### 7.2 Crafting Blueprints

Recipes are acquired via skills or friendship.

- **Refining Equipment:**
  - *Charcoal Kiln:* 20 Wood, 2 Copper Bar. (Foraging Lv 2).<sup>31</sup>
  - *Crystarium:* 99 Stone, 5 Gold Bar, 2 Iridium Bar, 1 Battery Pack. (Mining Lv 9).<sup>10</sup>
  - *Furnace:* 20 Copper Ore, 25 Stone..<sup>32</sup>
- **Artisan Equipment:**
  - *Keg:* 30 Wood, 1 Copper Bar, 1 Iron Bar, 1 Oak Resin. (Farming Lv 8).<sup>10</sup>
  - *Preserves Jar:* 50 Wood, 40 Stone, 8 Coal. (Farming Lv 4).<sup>10</sup>
- **Lighting:**
  - *Torch:* 1 Wood, 2 Sap.
  - *Campfire:* 10 Stone, 10 Wood, 10 Fiber.<sup>10</sup>

### 7.3 Tailoring and Dyeing

The Sewing Machine (Emily's house) combines **Cloth** (Feed) + **Item** (Spool) to create clothing.<sup>33</sup>

- **Recipes:**
  - *Classic Overalls:* Cloth + Complete Breakfast.
  - *Prismatic Clothing:* Cloth + Prismatic Shard (Random outcome).

- *Suit Top*: Cloth + Bouquet.
- *Plain Shirt*: Cloth + Wool.
- **Dyeing**: Items can be dyed using the Dye Pots (Red, Orange, Yellow, Green, Blue, Purple). Items placed in pots are consumed. Full saturation requires items in all 6 pots to unlock the HSV slider.<sup>34</sup>

## 8. Environmental Resources: Foraging

Seasonal forage spawns reset weekly on Sundays.

- **Spring**: Wild Horseradish, Daffodil, Leek, Dandelion. Morel (Secret Woods), Spring Onion (Cindersap). Salmonberry bushes (Spring 15-18).<sup>35</sup>
- **Summer**: Spice Berry, Grape, Sweet Pea. Fiddlehead Fern (Secret Woods).<sup>35</sup>
- **Fall**: Common Mushroom, Wild Plum, Hazelnut, Blackberry. Chanterelle (Secret Woods).<sup>35</sup>
- **Winter**: Winter Root (Tillable), Snow Yam (Tillable), Crystal Fruit, Crocus, Holly.<sup>35</sup>
- **The Beach**: Clam, Cockle, Mussel, Oyster. Rainbow Shell (Summer), Nautilus Shell (Winter).<sup>36</sup>

## 9. Advanced Systems: Ginger Island and Special Orders

### 9.1 Ginger Island

A late-game region unlocked by repairing the boat at Willy's Fish Shop.

- **Golden Walnuts**: The primary currency for island progression. Total count: 130.
  - *Locations*: Fishing (5), Farming (5), Mussel Nodes (5), Volcano Chests.
  - *Puzzles*: Mermaid (Flute Blocks tuned to stone size), Gem Birds (East Shrine), Simon Says (Cave), Gourmand Frog (Grow Melon -> Wheat -> Garlic).<sup>37</sup>
- **Volcano Dungeon**: Contains the **Forge** on Floor 10. Allows weapon/tool enchanting using Cinder Shards and Prismatic Shards.
  - *Enchantments*: Crusader (Weapon - Kills mummies), Vampiric (Weapon - Health steal), Efficient (Tool - No energy), Bottomless (Watering Can).<sup>38</sup>

### 9.2 Special Orders

Accessible via the board in front of Lewis's house (Fall 2, Year 1).

- **Rock Rejuvenation (Emily)**: Rewards Sewing Machine.
- **Fragments of the Past (Gunther)**: Rewards Bone Mill recipe.<sup>39</sup>
- **Cave Patrol (Clint)**: Rewards Geode Crusher recipe.<sup>40</sup>
- **Qi's Special Orders**: Accessible in the Walnut Room. Rewards Qi Gems for items like "Horse Flute" and "Key to the Town".<sup>41</sup>

## 10. Technical and Modding Data

For technical implementation in RAG systems, the following data structures are relevant.

- **Tailoring Data:** Stored in Data/TailoringRecipes. Keys include FirstItemTags (usually cloth) and SecondItemTags (spool item).<sup>42</sup>
- **Festival Data:** Located in Data/Festivals/FestivalDates and specific files like Data/Festivals/fall27 (Spirit's Eve). Conditions are formatted as <location> / <time>.<sup>43</sup>
- **Quest Data:** Stored in Data/Quests.xnb. Defines requirements, text, and rewards.<sup>44</sup>
- **Monster Data:** Indices define stats. Index 12 designates "mine monsters" (buffed stats at mine bottom).<sup>45</sup>

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*This document synthesizes all provided research snippets into a structured schema, ensuring no data point—from crop prices to debug commands—is omitted.*

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