Top of the Heap

A board game for 3-5 players

CONCEPTUAL OVERVIEW

In *Top of the Heap*, players assume the role of a scavenger who searches for trash around a human neighborhood by night. After all rounds of play, the animals who have collected the best trash in their dens are declared the winners.

DESIGN PRINCIPLES

- The player should always feel in control of their experience.
- The game world should develop over the course of the game.
- Players should generally accept risks explicitly rather than being the victims of chance.
- If a player is subject to the immediate outcome of a decision they did not make, it should be due to another player's explicit decision to accept it
- A player should always be rewarded for taking a risk, regardless of the consequence.
- Few, if any, randomized outcomes should be purely punitive.
- A consequence that is purely punitive should provide a choice between multiple outcomes,
- If a player's risk results in a persistent consequence, that player should suffer an immediate consequence as well.

HIGH-LEVEL MECHANICAL CONSIDERATIONS

1. Asymmetric Balance - As different animals, players will share a number of common verbs but will have distinct intrinsics that affect how they play the game.
2. Indirect Interaction - Players will not be able to affect each other directly, but can alter the board state in ways that affect some or all players to varying degrees. The machinations of each player will alter the strategic decisions of each other player on a turn-to-turn basis by virtue of the persistence of the world.
3. Persistent World - The state of the board will persist between player turns and rounds of play, allowing player actions to have far-reaching consequences. Players will be able to develop their resources and the shared world state between turns and rounds of play.
4. Resource Utility - Each resource should have multiple ways it can be used: one or more core verbs, one or more apparent thematic verbs, and one or more situational verbs.

Some of these verbs will be available or unavailable depending on the animal who holds the resource and the game state and will overlap, e.g. an item having a use that is both situational and thematic.

5. Player Agency - Players should feel in control of their play experience. Period.
6. Minimal Randomness - The core of the game will be based on and built around stability and consistency between play experiences. Resource availability will be randomized but there will be additional systems to accommodate this for the sake of variety. Blindly random opportunities are acceptable, but never blindly random penalties. Randomness should never be forced upon players, but it is acceptable as the possible consequence of a player's informed decision.
7. Meaningful Decisions - Players will have a limited number of actions per round, but the actions available will have clear and immediate effects that allow a player to develop their resources and affect the state of the world over the course of the game.
8. Scope of Consequences - If a player suffers a consequence that has a persistent effect on the board, that player should also immediately suffer a consequence of their own as part of the result. Any time a consequence occurs, it will be at the end of a given player's turn, which means all other players will be subject to permanent consequences before the player who triggered them. Subjecting the triggering player to an immediate consequence enforces the notion that a person should be subject to the outcome of their actions first and foremost before other players.

GAMEPLAY OVERVIEW

Setup involves each player choosing the animal they will play, taking any tokens or pieces they need, and prepping the board.

Gameplay takes place over 7 rounds, which represent the passage of a week in-game, Sunday through Saturday. During each round, players take turns in clockwise order around the table. On each turn, a player can make a free movement action and pay the cost to take a single non-movement action unless something in-game specifies otherwise.

Over the course of the game, players will collect item cards with varying uses and bring them back to their respective dens. At the end of the final round, all players score victory points for the items in their respective dens, which are then added to any other victory points accumulated. The player or players with the highest total amount of victory points are declared the winners.

MECHANICS & IMPLEMENTATIONS

Victory Points (VP)

Victory Points (VP) are the game's scoring mechanism. They represent resources banked and unspent at the end of the game, and by parallel they are both the mechanical result of the player's investment and the thematic measure of the animal's comfort and quality of life.

The player's primary method of earning VP comes from scavenging, which is represented by the core gameplay loop.

Core Gameplay Loop

Each game is divided into 7 rounds, and each round is divided into multiple turns. Each player spends their turns engaging the core gameplay loop: the player ventures out to scavenge for trash (movement), collecting trash (gathering), then returning their spoils to their dens (banking).

At the end of each game, each player scores VP for each item they currently have banked in their den.

ACEs: Things That Happen

All things that can affect the game state are one of the 3 ACEs: Actions, Consequences, and Events.

Actions represent things that are within a player's control, and taking actions is the way that players influence the state of the game board.

Consequences represent the effects of player actions and game events. They can be positive or negative, and a single consequence can affect individual players differently.

Events represent things that happen outside of any player's control. They are a way of mechanically reinforcing the fiction of the game by simulating the passage of time in the game world.

Action Points (AP)

Each player can take a limited number of actions per turn, represented by their Action Points (AP). Each non-movement action has an associated AP cost. ~~When a player is out of AP and has returned to their den (a movement action, free), they pass their turn for the remainder of the round.~~ A player can opt to pass their turn for the remainder of the round without using all their AP, which will have an effect yet to be enumerated.

Each player will have a number of tokens in a single color to represent their AP pool, split into two piles: unspent and spent. A player will start each round by moving all their AP tokens into the unspent pile and will move them to the spent pile as they spend them.

Temporary AP

Additionally, a player can gain a second color (TBD) of AP tokens, which represent small snacks that can be eaten to gain temporary AP. Temporary AP can be spent like normal AP, but it is not added to your spent pool, it is lost when spent.

Item Cards

All items in the game will be represented by item cards (final name: Trash cards).

The face of an item card will contain the card name, the card art, and the card's rules text, if any. Each item card will also have a clear list of tags, either explicit or symbolic, that represent the mechanical core stats of the item.

There will be multiple places on the board where items can be scavenged by players. Scavengable items can be face-up or face-down depending on their location and other gameplay events and actions. Item cards can exist in any of 3 larger zones: the game board, the discard pile, and a player's inventory.

Player Inventory

Players will store cards they've collected in their respective inventories. A player's inventory can hold 2 sets of face-up cards, Carried cards and Stashed cards, which should be clearly separated on the table in front of each player.

Carrying Items/Item Size

Each animal can carry a limited number of items, which will be different for each animal. A carried item goes in that player's Carried cards area. Items will each have a tag that determines their carriability. The sizes from smallest to largest are "Trivial", "Stable", and "Awkward".

Mechanically, a Trivial item is something an animal (abstractly, using a vague notion of a personified small quadruped, like a raccoon, as a Platonic 'animal') could keep on their person (within the fiction) without encumbering them in any way. A Stable item is something our animal could carry with one hand, and an Awkward item is something our animal would need two hands for (or more).

An animal's encumbrance will increase with each additional item they try to carry, and it cannot exceed Awkward. Each animal has 3 Carried card slots, and each slot has a base capacity. The first slot can hold a single Trivial item without penalty regardless of their other Carried items. This represents the effortlessness of carrying the item. The second and third slots represent the

hands or hand-analogues of the animal. The second slot is Stable and will hold a second Trivial item or a single Stable item. The third slot is Awkward and can hold a third Trivial item, a second Stable item (1 Trivial, 2 Stable), or a single Stable item with top of two Trivial items (2 Trivial, 1 Stable). Any Awkward item carried MUST occupy the third slot and renders the second slot unavailable while it's being carried (because it requires both hands).

Specific item cards and animal abilities may be able to alter these carrying restrictions on an individual basis.

Item Value

Items will each have at least 2 tags that denote their value. One of the required tags will be the item's VP value that a player will score for having that item in their den at the end of the game. The second required tag will be the item's size, which will be used for item valuation when bartering with the Magpie.

Each item may also have an additional value tag that notes which (if any) animals prefer that item. If an animal prefers an item, it can confer them additional benefits if banked or possibly consumed.

The Magpie & The Magpie's Nest

During their turn, one of the available locations for the players to visit will be The Magpie's Nest.

The Magpie will serve as a storefront of sorts and the game's trade hub. During a player's turn, they can move to the Nest to engage one of the services the Magpie offers, which will include item trading and information scouting.

At the start of each round, any item cards at the Nest are shuffled into the Item Deck, then 3 item cards are laid face up at the nest. These item cards are available for trade to all players. While a player is at the Nest, they can trade any item they're currently carrying for one of the Magpie's available items that is of equal or lesser size.

The Village

Thematically, the game takes place in and around 'The Village'. The Village is a small seaside town where the forest and prairie peek through a gap in the mountains, and this location allows for a diverse cast of characters, animal and human.

The Animals

Each player plays as a different animal from the cast. The animals are, in no specific order:

- The Raccoon
- The Possum
- The Coyote
- The Fox
- The Seagull
- The Raven
- The Bear (?)

Each animal is balanced differently and has its own strengths and weaknesses.

Taking Turns

Each night is composed of 4 rounds. Each player can take 1 turn per round. Once a player passes their turn, they can take no other actions in the round. Each player takes their turn in order clockwise around the board as the previous player finishes their turn.

On a player's turn, they can take one of the game actions available to them by declaring it to the table and performing any associated upkeep. (Upkeep in this case refers to moving pawns, moving tokens, and moving cards.)

Player Actions (Explicit) & Player States (Implicit/Abstract)

The actions available to a player on their turn are context-sensitive; that is to say, the set of all player actions exist within a hierarchical state machine.

At the top level of abstraction (Procedure), a player can be in 1 of 3 states:

- Taking their turn [A]
- Waiting for their next turn [B] (Another player's turn)
- Waiting for the next round [C] (Passed their turn for the round)

Of these 3, only [A] is a composite state.

The next level of abstraction (Simulation) represents [A] and is a confluence of the state data of the player's character (their animal) and the game board (the world).

The simulation data for an animal is composed of multiple points:

- Current animal (species intrinsics)

- Current carried items
- Current location

The simulation data for the world is composed of multiple points as well:

- Modifiers on individual locations (risk cards)
- Face-up and face-down cards on individual locations
- Other animals' current locations

Placeholder

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Questions That Still Need To Be Answered

- What are our key verbs?
    - MOVE (active)
    - RAID (active)
    - CARRY (passive)
        - TAKE (active)
    - STASH (active)
        - DROP
    - TRADE (active)
        - SWAP
    - USE (active/passive?)
    - EAT (active)
- NOTE:
    - CONSEQUENCES.
    - Consequences are enforced via Risk cards

    - Consequences can be enforced to add meaning to decisions and to affect the board as the game goes on.
    - We start the game with no/as few as possible modifiers on individual locations.
    - THEN we add consequences to the cost to perform subsequent actions at each location.
    - Those consequences accumulate over time and create randomized rulesets that materialize at each location as the game goes on. This creates gates that we don't have to hand-design, we just have to build the procedural generation.
- What should cost an action?
- What is 1 VP worth?
- What makes the animals meaningfully different?
    - Animals have different tags that determine how the Risk cards affect them.
    - Animals' encumbrance affects how they can move.
    - Animals' tags determine which Risk cards they can avoid.
    - Animals' tags determine how they can use various items.
    - Animals have tags rather than stats.
    - Tag notes
        - Raccoon/Possum
            - MOVE:
                - Relatively medium
                - Can climb, can't jump, can dig
                - Can't fly
                - Very low land speed
            - RAID:
                - Can open trash cans
                - Can use tools
            - CARRY:
                - Very dexterous, can use their paws for carrying
        - Coyote/Fox
            - MOVE:
                - Relatively large
                - Can't climb, can jump, can dig
                - Can't fly
                - Very high land speed
            - RAID:
                - Can't open trash cans
                - Can't use tools
            - CARRY:
                - Non-dexterous, can use their mouth for carrying

        - Raven/Seagull
            - MOVE:
                - Relatively small
                - Can't climb, can't jump, can't dig
                - Can fly
                - Very high air speed
            - RAID:
                - Can open trash cans
                - Can't use tools
            - CARRY:
                - Somewhat dexterous, can use their beak and feet for carrying
- How do we gate each verb?
    - Obstacles (official term: Features)
        - Trash cans
        - Dogs
        - Cats
        - Fences/Gates
        - Locks
        - Floodlights
    - Encumbrance
    - How do we gate MOVE?
    - How do we gate RAID?
        - We can impose separate costs for
        - Trash can mechanics
            - Does the can have a lid?
            - Does it require a tool to access?
            - Is the can standing up or has it been knocked down?
        - House access mechanics
            - How well can animals avoid detection in this yard?
                - Is it well-lit?
                - Are there places to hide?
                - Are there pets?
    - How do we gate STASH?
        - I don't know if we gate STASH. It should be automatic, like scoring a goal.
    - How do we gate TRADE?
        - TRADE can only go through an intermediary.
            - TRADE is a two-step process: drop and grab.

                - Some TRADE intermediaries are locations where you can drop an item and grab it later, but other animals could also grab the item.
        - How do we gate USE?
            - Probably by capping the amount of AP a player can use per turn.
        - How do we gate EAT?
        - How do we gate item acquisition?
            - Trash can mechanics
                - Does the can have a lid?
                - Does it require a tool to access?
                - Is the can standing up or has it been knocked down?
- How many of each type of card do we need?
    - 7 animals, could each loot 3 trash per turn max? 21 * 7 rounds = 147 trash cards LOL
    - Fair to say there should be an equal number of trash cards and risk cards, since each risk card draw comes from pulling trash
    -
- What uses can items have to make them incomparable?
    - Food
        - Can be eaten to gain AP.
        - Discarded when eaten, you can either EAT or STASH a piece of food, not both.
    - Tools
        - Abstractly, a ‘tool’ is used to open a ‘gate’.
            - The specific terminology we’ll use is a TOOL nullifies a SNAG?
        - What happens when used depends on the tool and the gate: this can vary as is thematically appropriate.
        - What is a gate/what tool opens it?
            - gate: dog, tool: bone
                - Pacifies the dog, makes the player that uses it immune for a round? Takes the dog off the board for the round?
    - Rare specifics
        - Items can have very specific use cases that allow a player to benefit or that allow a player to dodge penalties.
    - Notes on gaining AP
        - In a single instance, if the only thing that a movement gate does is consume more AP, there is no functional difference between lowering a cost by opening the gate and gaining AP to circumvent the gate.
            - Using AP as a universal action currency does make AP gain meaningful.

        - Opening a gate to lower a cost becomes a meaningful action if it persists(!!!), because we've already decided that all AP gain during turns will be temporary gains from food or risks.
- Item concepts
    - Pecan pie
        - Whole uneaten pie - awkward, edible
        - Pie in tin - awkward, might be worth something, can hold slices and crusts
        - Half-eaten pie crust - trivial, edible
        - Unfinished slice of pie - stable, edible
    - Pizza box
        - Box itself - awkward, not worth much, can hold slices and crusts
        - Pizza crust - trivial, edible
        - Slice of pizza - stable, edible
    - Wings box
        - Box itself - awkward, not worth much, can hold wings and bones
        - Chicken bone - trivial, useful
        -