# The Gold Rush

How tagging equals mining: a permissionless registration system where
the act of discovering old-growth trees creates the tokens that represent them.

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**Abstract**

The Arboreal Capital registry must eventually contain every eligible old-growth tree on Earth — an estimated population in the billions, distributed across every continent except Antarctica. No centralized organization can survey, verify, and register that many trees. This paper presents a registration mechanism modeled on Bitcoin's mining incentive: the act of discovering and documenting an unregistered tree *creates* the token that represents it, and the discoverer receives that token as compensation. We call this mechanism 'tagging,' and we argue that it produces a self-funding, self-expanding global tree registry that requires no central authority, no upfront capital, and no ongoing organizational effort — while generating accurate data through economic incentives that punish fraud more severely than they reward discovery. We introduce two design principles — *preference alignment* (engineering the system so that pursuing self-interest produces conservation) and *gomboc engineering* (shaping the process so that gravity rolls every outcome toward exactly one preferred equilibrium) — and describe the genesis satellite scan that establishes the evidentiary baseline for the entire registry.

## 1. The Scale Problem

There are approximately 3.04 trillion trees on Earth (Crowther et al., 2015). No one has counted how many qualify as old-growth — trees older than 250 years, predating the Industrial Revolution. The number does not exist in the literature. But consider: the boreal forests of Siberia and Canada alone contain approximately 750 billion trees, vast tracts of which have never been logged. Many boreal species in undisturbed stands routinely exceed 250 years. If even 1% of all trees on Earth are older than 250 years, the eligible population is roughly 30 billion. Reasonable estimates range from the low billions to the tens of billions. These trees are distributed across boreal forests in Siberia and Canada, tropical rainforests in the Amazon and Congo basins, temperate forests in Europe and the Pacific Northwest, and scattered specimens on every other inhabited continent.

No existing organization has catalogued them. The United Nations Food and Agriculture Organization tracks forest *area*, not individual trees. National park services track specimens within their boundaries, which represent a fraction of global old-growth. Satellite imagery can identify forest canopy but cannot reliably determine the age of individual trees from orbit.

A centralized registration effort would require field teams deployed across every forested region on Earth, operating across dozens of jurisdictions with varying levels of access and cooperation. The cost would be measured in billions. The timeline would be measured in decades. And by the time the survey was complete, some portion of the registered trees would already be dead.

The registration mechanism must therefore be decentralized, self-funding, and self-correcting. It must work without a central authority directing the effort. It must attract participants through economic incentive rather than institutional mandate. And it must produce accurate data despite having no way to directly supervise the people generating it.

> **Design Constraint: The registry must scale to tens of millions of entries across every jurisdiction on Earth, funded and populated entirely by distributed participants acting in their own economic self-interest.**

## 2. Tagging Equals Mining

Bitcoin solved an analogous problem. The Bitcoin network requires a distributed ledger maintained by thousands of independent operators, none of whom report to a central authority. Satoshi Nakamoto's insight was that the *work* of maintaining the ledger could itself be the mechanism that distributes new currency. Miners do not get paid to secure the network; they secure the network because doing so creates the coins that pay them. The work *is* the reward.

Arboreal Capital applies this insight to tree registration. The work of finding, documenting, and submitting an unregistered old-growth tree creates the token that represents it. The discoverer — the tagger — receives that token. No one pays the tagger. No fund disburses rewards. The act of registration is itself the creation of value, just as the act of mining is itself the creation of Bitcoin.

This produces the gold rush dynamic that bootstraps the registry. The first taggers face the easiest conditions: famous trees, accessible forests, well-documented specimens. As the low-hanging fruit is claimed, later taggers must work harder — venturing into remote taiga, navigating dense tropical canopy, or identifying overlooked specimens in well-surveyed regions. The difficulty curve mirrors Bitcoin's mining difficulty adjustment, though it is driven by geography and ecology rather than computation.

**Key Insight: The token does not exist until the tree is tagged. Tagging does not distribute existing tokens — it creates new ones. The registry grows because growing it is profitable.**

## 2.1 What the Tagger Receives

When a tagger successfully registers a tree, the smart contract mints a new ERC-721 token representing that tree and assigns it to the tagger's wallet. The tagger owns that token outright. They can hold it, sell it, or transfer it. There is no vesting schedule, no lockup period, and no clawback mechanism.

The tagger receives 100% of the token. This is a deliberate design choice. Early versions of the mechanism explored splits — 50% to tagger, 50% to a verification reserve; or 90% to tagger with 10% allocated to ongoing maintenance. Each of these designs was rejected for the same reason: any split reduces the tagger's incentive and introduces a treasury that must be governed. A treasury requires governance. Governance requires an institution. An institution can be captured. The permissionless design (Research Note 001) prohibits institutional dependencies.

Ongoing verification is funded separately through the holder fee mechanism described in Research Note 002 (Section 4), with refinements to the incentive structure under active development (see Research Note 005). The registration mechanism and the verification mechanism are economically independent. This separation is critical: it means the gold rush can operate at maximum velocity without being throttled by verification costs, and verification can operate indefinitely without depending on continued registration activity.

## 2.2 The Free Entry Requirement

Tagging must be free. Not cheap — free. Any fee, however small, transforms the gold rush from mining into purchasing. Mining is viral. Purchasing is not. A person in Manila who discovers they can earn tokens by identifying Siberian pines from free satellite imagery will tell other people in Manila. A person who must pay $5 per submission will not.

The only cost a tagger incurs is the blockchain gas fee for the minting transaction. On Layer 2 networks such as Base, this is typically less than $0.01. This is a technical cost of using the network, not a fee charged by the protocol. The distinction matters: the protocol extracts nothing from the tagger at the point of registration.

The cost to the tagger is their time and effort — the same cost a Bitcoin miner pays in electricity. The reward is the token. If the token is worth more than the effort, people will tag. If not, they won't. The market decides.

## 3. Proof of Tree: The Submission Standard

The critical design question is not *who* can tag — anyone can — but *what constitutes a valid tag*. The submission standard must be rigorous enough to prevent fraud while accessible enough to enable global participation. If the bar is too high, only professionals with expensive equipment can participate, killing the gold rush. If the bar is too low, the registry fills with garbage data.

### 3.1 Specimen Eligibility

The protocol uses the term 'tree' colloquially throughout its documentation because the vast majority of eligible specimens are, in fact, trees. But the formal eligibility criterion is broader: a **specimen** is any living plant with a woody or persistent structure that has occupied its geographic coordinates for at least 250 years.

This definition deliberately avoids botanical taxonomy. It includes ancient saguaro cacti in Arizona, 300-year-old grapevines in southern Europe, millennial baobabs in Madagascar, the 2,000-year-old welwitschia of the Namib Desert, and the ancient wisteria of Japan. If it is old, it is alive, and it is rooted to a spot on Earth, it qualifies. The conservation mechanism does not care about taxonomy. It cares about survival at a coordinate.

Edge cases are inevitable — a 250-year-old moss colony, a sprawling fungal network — and are resolved by the confirmation layer and, if necessary, the dispute mechanism (Research Note 004). The eligibility definition is a starting point, not a cage. The protocol's scope may expand as the registry matures and the community encounters organisms that deserve protection regardless of whether they fit a narrow botanical definition of 'tree.'

### 3.2 The Submission Package

A tagging submission consists of four elements:

**Geographic coordinates.** Latitude and longitude to five decimal places, providing approximately 1.1-meter precision — sufficient to distinguish individual specimens in all but the densest forest canopy. The smart contract stores coordinates to six decimal places (0.11-meter precision) to provide headroom for future refinement. Coordinates that resolve to urban areas, open water, agricultural land, or other non-forest land use are automatically rejected.

**Satellite evidence.** A reference to publicly available satellite imagery (Sentinel-2, Landsat, or equivalent) showing tree canopy at the specified coordinates. The tagger does not need to purchase imagery; Sentinel-2 data from the European Space Agency's Copernicus program is freely available globally at 10-meter resolution with a 5-day revisit cycle. The submission must reference imagery no older than 12 months.

**Age attestation.** A classification of the tree's estimated age tier: 250–500 years, 500–1,000 years, 1,000–2,500 years, or 2,500+ years. The attestation is based on species, trunk diameter visible in imagery, geographic context, and any available scientific literature. This is an estimate, not a measurement. Core sampling is not required. The age tier is recorded in the token's metadata and can be updated through the dispute mechanism (Research Note 004) if subsequent evidence warrants reclassification.

**Staking collateral.** The tagger must stake a modest amount of collateral — denominated in ETH or stablecoin — that is returned upon successful validation and forfeited upon rejection. This is not a fee (the tagger gets it back). It is a spam filter. The stake must be large enough to make mass-submission attacks uneconomical but small enough to not exclude participants in low-income regions. Initial calibration targets the equivalent of $1–5 USD, adjustable by governance.

> **Design Principle: The submission standard is 'satellite plus stake.' Free imagery plus a small refundable deposit. Accessible to anyone with internet access. Costly enough to deter spam. No specialized equipment required.**

### 3.3 What Constitutes Old-Growth

The 250-year threshold is a policy choice, not a biological one. Trees do not undergo a visible transformation at their 250th birthday. The threshold was selected for three reasons.

First, it is historically meaningful. A tree older than 250 years predates the onset of the Industrial Revolution, meaning it has survived the entire period of anthropogenic atmospheric transformation. This is narratively powerful and defensible.

Second, it is estimable without invasive measurement. For the vast majority of species, a trained observer can distinguish a 250-year-old specimen from a 50-year-old one using trunk diameter, canopy structure, bark characteristics, and species-specific growth rates. Dendrochronology (core sampling) is the gold standard for precise dating, but it is invasive, expensive, and requires physical access. The mechanism cannot depend on it at scale.

Third, it restricts supply to a meaningful degree. If the threshold were 100 years, the eligible population would be in the hundreds of millions — diluting the scarcity that drives token value. At 250 years, the eligible population is smaller, the specimens are more ecologically significant, and the conservation case is stronger.

Misclassification is inevitable and acceptable. A 200-year-old tree registered as 250+ is still an ecologically valuable specimen worth protecting. The mechanism's conservation function is not harmed by moderate age estimation errors. The dispute mechanism (Research Note 004) provides a path for reclassification if evidence warrants.

## 4. Validation: The Confirmation Layer

A submission is not automatically accepted. Between submission and minting, a validation layer confirms that the submission meets the standard. This layer must operate without a central authority while still producing reliable judgments.

### 4.1 The Confirmation Pool

When a tagger submits a claim, it enters a confirmation queue. A set of independent confirmers — randomly selected from a pool of staked participants — review the submission. Each confirmer independently evaluates whether the coordinates resolve to a plausible old-growth tree based on the satellite evidence and age attestation provided.

Confirmers are not paid a bounty. They stake collateral to participate and earn a small fee — funded by the protocol's mechanical spread (Research Note 002, Section 4) — for each confirmation completed, regardless of whether they vote to accept or reject. This eliminates the incentive to rubber-stamp submissions. The confirmer's economic interest is in *accuracy*, not in any particular outcome, because their stake is slashed if their vote is consistently out of consensus with other confirmers.

A supermajority of confirmers (e.g., 4 of 5, or 5 of 7) must approve the submission for the token to be minted. If the submission is rejected, the tagger's stake is forfeited and distributed among the confirmers. If accepted, the tagger's stake is returned and the token is minted to their wallet.

### 4.2 Preventing Collusion

The primary attack vector is collusion between taggers and confirmers — a tagger who controls multiple confirmer accounts could approve their own fraudulent submissions. Three design features mitigate this.

First, confirmer selection is random and weighted by stake size and historical accuracy. A new account with minimum stake has a low probability of being selected and an even lower probability of being selected alongside co-conspirators. The cost of building enough sybil accounts to reliably control a confirmation panel exceeds the value of most individual tree tokens.

Second, confirmations are subject to random audit. A percentage of confirmed submissions are re-reviewed by a second, independent panel. If the original confirmation is found to be fraudulent, both the tagger and the original confirmers lose their stakes. The audit probability is unpredictable, making collusion a gamble with asymmetric downside.

Third, the community can challenge any registered tree through the dispute mechanism described in Research Note 004. A tree that was fraudulently registered — coordinates pointing to a parking lot, an obvious sapling, or a nonexistent location — can be challenged and deregistered at any time, destroying the token and the tagger's investment. Fraud has no statute of limitations.

> **Design Principle: Fraud is possible but unprofitable. The cost of reliably gaming the confirmation system exceeds the expected value of a fraudulent registration. The system tolerates occasional fraud because the dispute mechanism catches it retroactively.**

## 5. The Gold Rush Dynamics

### 5.1 Phase 1: The Famous Trees

The first wave of taggers will register the world's most famous and well-documented trees. Hyperion, Methuselah, General Sherman, J■mon Sugi, the Olive of Vouves — specimens whose coordinates, ages, and species are published in scientific literature. These are the easiest tags: the evidence is freely available, the age attestation is trivially defensible, and the resulting tokens carry immediate brand recognition.

The genesis collection of 12 trees minted by Arboreal Capital serves as the seed for this phase. These tokens were minted by the protocol creator and establish the format, metadata standard, and verification precedent for all subsequent registrations. They are proof of concept, not a centralized allocation — the protocol does not reserve any further minting authority for itself.

### 5.2 Phase 2: The Known Forests

The second wave targets trees in well-surveyed forests: national parks, protected areas, and regions with existing scientific inventories. A tagger with access to forestry databases can cross-reference known old-growth stands with satellite imagery and register hundreds of trees per day. This is the highest-volume phase. The taggers are not in the forest — they are at computers, using publicly available data to identify and register specimens remotely.

This is the 'guy in Manila' scenario. A person with internet access, no specialized training, and access to free Sentinel-2 imagery can identify old-growth candidates in Siberian taiga, Canadian boreal forest, or Amazonian rainforest. The work is tedious but not difficult. The reward is the token. At sufficient market prices, this becomes a viable income source — particularly in regions where the cost of living is low relative to token values.

### 5.3 Phase 3: The Frontier

The third wave requires physical presence. Remote, unsurveyed, or poorly mapped forests contain old-growth specimens that cannot be confirmed from satellite imagery alone. Taggers in this phase are explorers — venturing into the Congo Basin, the interior of Borneo, or the mountains of Papua New Guinea to document trees that no satellite can age-estimate.

These expeditions are expensive, dangerous, and slow. But the tokens they produce are commensurately valuable: a previously undocumented ancient specimen in an inaccessible location carries a scarcity premium that justifies the effort. The difficulty curve is self-regulating. As long as the expected token value exceeds the expected expedition cost, frontier tagging continues. When it doesn't, it stops — and the remaining undiscovered trees are, by definition, the ones no one can profitably reach, which means they are also the ones least likely to be cut down.

> **Key Insight: The trees that are hardest to register are also hardest to destroy. The mechanism's coverage gap is precisely the set of trees that need protection least.**

## 6. Duplicate Prevention and Coordinate Locking

Each tree can only be registered once. The smart contract enforces uniqueness through coordinate locking: when a token is minted, its coordinates are recorded on-chain, and any subsequent submission within a configurable exclusion radius (initially 10 meters) is automatically rejected. This prevents the same tree from being registered twice under slightly different coordinates.

The exclusion radius is necessarily a rough tool. A 10-meter radius works for solitary trees in open landscapes but may be too small for dense forest canopy where individual trees are difficult to distinguish from satellite imagery. Too large, and it prevents neighboring trees from being registered individually. The initial calibration of 10 meters is conservative — it can be adjusted through governance as the registry matures and real-world edge cases emerge.

### 6.1 The Pando Problem

Pando, a quaking aspen colony in Utah, consists of approximately 47,000 genetically identical stems sharing a single root system. The colony is estimated to be 80,000 years old. Is Pando one tree or 47,000 trees?

For the purpose of the Arboreal Capital registry, Pando is 47,000 trees. Each stem has its own coordinates, its own canopy, and its own survival status. A stem that dies does not kill the colony. The rule is absolute: one tree, one point, one token. A grove is a collection, not a single entry. This is not a simplification — it is a design constraint that prevents the classification of entire forests as single tokens, which would collapse the mechanism's granularity.

## 7. Economic Equilibria

The gold rush mechanism has two stable equilibria and one unstable transition between them.

### 7.1 Equilibrium A: Growth Phase

When the expected value of a new token exceeds the expected cost of tagging (effort plus gas plus opportunity cost), new taggers enter and the registry expands. This is the growth phase. Expansion continues as long as there are unregistered eligible trees and the economics remain favorable. In this phase, the registry grows at a rate determined by market price, available satellite data, and the number of active taggers.

### 7.2 Equilibrium B: Saturation Phase

When most accessible trees have been registered and the remaining unregistered trees require expensive expeditions, tagging activity declines to a trickle. New registrations occur only when a specific tree's expected value justifies the expedition cost. The registry is effectively complete. This is the steady state.

In saturation, the protocol's economic engine shifts from registration (new token creation) to trading (secondary market activity on existing tokens) and verification (the holder fee mechanism described in Research Note 002). The gold rush ends, but the conservation mechanism continues — because the tokens now exist and their holders now have a financial interest in the survival of the trees they represent.

### 7.3 The Transition

The transition from growth to saturation is gradual, not abrupt. As the easiest trees are claimed, marginal tagging costs rise. As supply increases, marginal token value may decline (or may not, if demand grows faster than supply). The system self-regulates: tagging slows when it becomes unprofitable and accelerates when market conditions improve. No governance intervention is required. The mechanism adjusts automatically through the same price signals that govern every other market.

> **Design Principle: The registry does not need to be complete to be valuable. A registry of 1 million trees protects 1 million trees. A registry of 50 million protects 50 million. Coverage is a gradient, not a binary.**

## 8. Edge Cases and Objections

### 8.1 Satellite Image Manipulation

A tagger could submit manipulated satellite imagery showing forest canopy where none exists. This attack is mitigated by the confirmation layer (Section 4), which independently verifies submissions against raw satellite data rather than tagger-provided screenshots. Confirmers access imagery directly from Copernicus Open Access Hub or equivalent data sources. The tagger provides coordinates, not imagery — the confirmers generate their own evidence.

### 8.2 Age Estimation Errors

The 250-year threshold cannot be precisely enforced from satellite imagery. Some registered trees will be younger than 250 years. This is acceptable. A 200-year-old Douglas fir misclassified as old-growth is still a large, ecologically significant tree whose destruction would be a meaningful loss. The mechanism's conservation value degrades gracefully with classification errors. Systematic fraud — deliberately registering saplings as old-growth — is caught by the confirmation layer and the dispute mechanism.

### 8.3 Jurisdictional Access

Some countries may restrict access to satellite imagery of their territory or prohibit foreign nationals from registering geographic data. North Korea, for example, is unlikely to welcome the registration of its old-growth forests. The mechanism does not depend on universal coverage. Trees in inaccessible jurisdictions remain unregistered until conditions change. The protocol does not negotiate with governments — it simply waits. As Research Note 001 argues, the mechanism must outlive any given government. A country that restricts registration today may not exist in its current form in fifty years. The trees will still be there.

### 8.4 The First-Mover Advantage

Early taggers receive tokens at minimal cost that may appreciate significantly as the protocol gains adoption. This creates a first-mover advantage that critics may characterize as unfair. The same criticism was leveled at early Bitcoin miners, early domain name registrants, and early adopters of every network-effect technology. The advantage is real and is the entire point — it is the economic engine that bootstraps the registry. Without disproportionate early rewards, there is no gold rush. Without a gold rush, there is no registry. Without a registry, there is no conservation mechanism.

The first-mover advantage is also self-limiting. Early taggers receive tokens for easy trees — famous specimens with well-documented provenance. These tokens carry brand recognition but also greater public scrutiny. The tagger of Hyperion does not operate in obscurity. The advantage compensates for the risk of being an early participant in an unproven protocol.

## 9. Relationship to Existing Registration Systems

Several organizations maintain registries of notable trees. The International Society of Arboriculture, the Monumental Trees project, and various national champion tree programs catalogue significant specimens. These registries are valuable data sources but share a common limitation: they are curated by institutions with finite budgets and institutional priorities. They cover famous and accessible trees. They do not and cannot cover the vast majority of old-growth specimens in remote or politically inaccessible regions.

The Arboreal Capital registry is not a replacement for these systems. It is a complement — one that extends coverage to any tree that any human being can identify and submit, regardless of institutional affiliation, geographic location, or professional credentials. Existing registries may serve as seed data for the gold rush: a tagger who cross-references the Monumental Trees database with satellite imagery can rapidly register known specimens. The existing data is a competitive advantage, not a competitor.

## 10. Design Philosophy: Preference Alignment and Gomboc Engineering

Two design principles underlie the registration mechanism — and, indeed, the entire Arboreal Capital protocol. They are named here because they recur throughout every design decision and deserve explicit articulation.

### 10.1 Preference Alignment

Every conservation mechanism in history has attempted to override human preferences: don't cut the tree, don't develop the land, don't prioritize short-term profit. These mechanisms fail because fighting preferences requires perpetual energy — institutional budgets, political will, cultural commitment — and that energy is finite. The moment it runs out, the preferences reassert.

Preference alignment inverts this. Instead of fighting what people want, engineer the system so that getting what they want — money, status, security — automatically produces the outcome you want: conservation. The tagger wants tokens. To get tokens, they must find and register real trees. The holder wants appreciation. To get appreciation, the tree must survive. The system does not ask anyone to care about trees. It makes caring about trees the default consequence of caring about money.

> **Design Principle (Preference Alignment): Never fight human preferences. Engineer the system so that pursuing self-interest produces the desired outcome. The mechanism works not because people are good, but because the incentive architecture makes selfishness productive.**

### 10.2 Gomboc Engineering

A gomboc is a three-dimensional convex shape with exactly one stable equilibrium point and one unstable equilibrium point. No matter how you place it, it self-rights to the same position. It was proven to exist mathematically in 1995 and first physically constructed in 2006 by Domokos and Varkonyi.

The Arboreal Capital mechanism is designed as an economic gomboc. No matter how participants interact with it — tagging, trading, holding, disputing, attempting to game — the system's shape rolls every outcome back toward exactly one equilibrium: trees stay alive, tokens stay valuable. Push it toward death-for-profit? The freeze eliminates the profit. Push it toward fraudulent registration? The confirmation layer and dispute mechanism reject it. Push it toward apathy? The holder fees fund verification regardless of participation. Every perturbation self-corrects.

The registration mechanism is a clear example. The gold rush could produce a flood of garbage data — but the staking requirement, the confirmation layer, and the retroactive dispute mechanism shape the process so that gravity pulls toward accurate registrations. The equilibrium is a correct registry, not because anyone enforces correctness, but because the shape of the mechanism makes correctness the path of least resistance.

> **Design Principle (Gomboc Engineering): Shape the process so that gravity does the work. The mechanism should self-right to the preferred equilibrium from any starting position, without requiring ongoing intervention.**

## 11. The Genesis Scan

The registration system requires an evidentiary baseline: a verifiable record of what the Earth's forest canopy looked like at a specific moment in time. Without this baseline, every tagging submission relies on the tagger's claim that a tree exists at the submitted coordinates, corroborated only by whatever satellite imagery the confirmers can find. The quality and recency of available imagery varies by region. Some areas have weekly coverage; others may have imagery months or years old.

The genesis scan solves this. At a designated moment — a single date and time, announced in advance — the protocol captures a comprehensive reference snapshot of global forest canopy using the highest-resolution freely available satellite imagery. This snapshot becomes the protocol's evidentiary anchor. Every tagging submission can be verified against it: was there a tree at these coordinates at the moment of the genesis scan?

The scan does not need to be a single image. It can be composited from multiple satellite passes within a narrow time window (e.g., Sentinel-2's 5-day revisit cycle allows near-global coverage within a week). Cloud-obscured regions can be filled with the most recent clear imagery prior to the scan date. The result is a dated, verifiable, publicly accessible mosaic of the Earth's forest canopy at the moment the protocol launches.

The genesis scan serves three functions. First, it establishes baseline evidence for every tree tagged in the first wave — confirmers can verify submissions against a known-good snapshot rather than hunting for imagery themselves. Second, it creates a historical record: in fifty years, the genesis scan will be an invaluable ecological document showing what the world's forests looked like at the moment the protocol launched. Third, it provides a clear temporal boundary. The protocol's official start is not a press release or a GitHub commit — it is a moment in time, recorded in satellite imagery, against which all subsequent claims are measured.

> **Key Insight: The genesis scan transforms 'was there a tree here?' from an open question into a verifiable fact. 'Was there a tree at 58.31940°N, 8.19086°E on May 13, 2026 at 11:22 UTC?' has a definitive answer. The scan provides it.**

Honest caveat: compositing a cloud-free global mosaic from satellite passes is a nontrivial data engineering task. The initial genesis scan may cover priority regions — areas with the highest density of eligible old-growth and the greatest deforestation risk — before achieving full global coverage. Subsequent scans can extend coverage incrementally. The principle is sound; the execution will be iterative.

## 12. Conclusion

The gold rush is not a marketing metaphor. It is the mechanism design. The registry cannot be built by hiring people to build it. It can only be built by making it profitable for people to build it themselves. Tagging equals mining: the work of discovery creates the value of the token, the value of the token funds the work of discovery, and the result is a global registry of old-growth trees that expands as long as expansion is economically viable and stops precisely when the remaining unregistered trees are too remote to be worth reaching — which means they are also too remote to be worth cutting down.

The system is a gomboc: it self-rights toward a complete, accurate registry from any starting position. It is preference alignment in action: no one is asked to care about trees, only about tokens. And the genesis scan provides the evidentiary anchor from which every claim is measured.

The system requires no budget, no staff, no institutional mandate, and no government cooperation. It requires only that the token have market value. Everything else follows from self-interest.

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