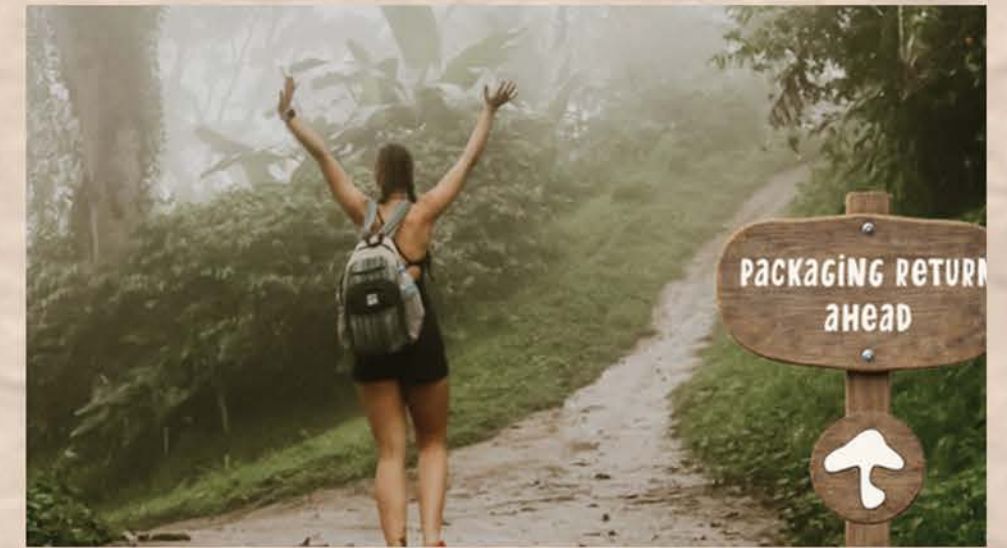




A Research-Driven Marketing Strategy and Regenerative Packaging System



PROJECT OVERVIEW

Concept

Regenerative mycelium-based packaging designed for national parks.



Goal

Encouraging sustainable visitor behavior and **reducing single-use waste** in parks.



Deliverables

A strategic **marketing plan**, flagship product prototypes, and a full **brand identity** system.

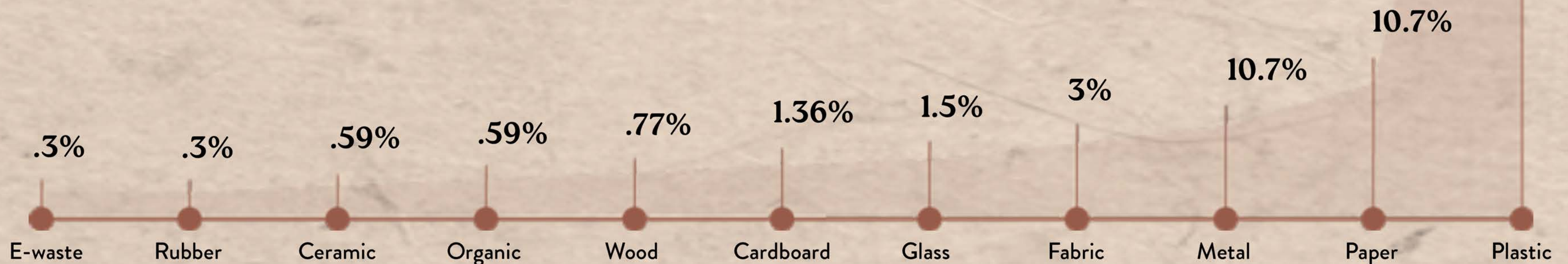


THE PROBLEM and DESIGN QUESTION

81%

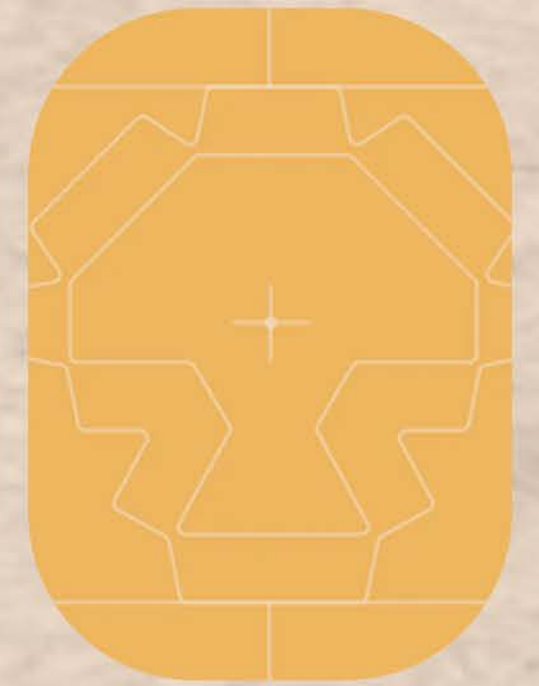
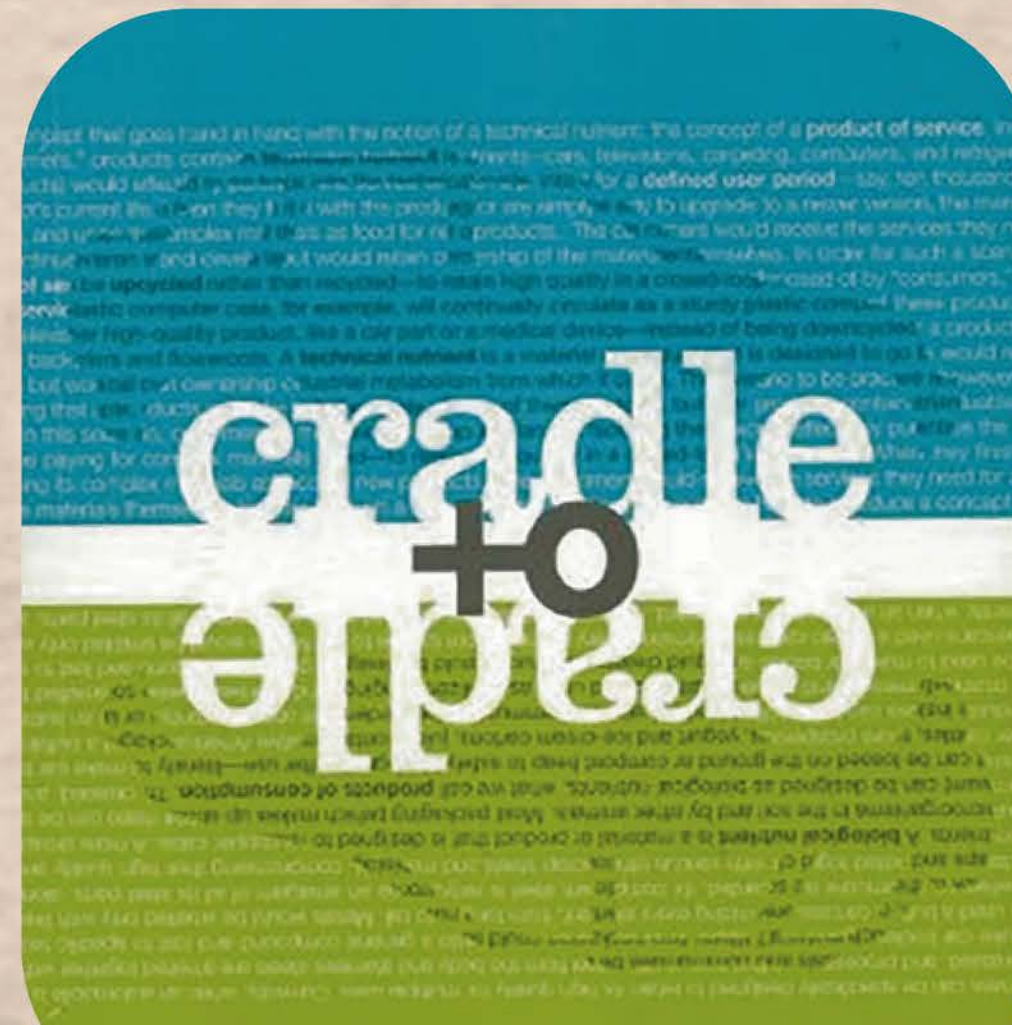
Plastics make up a staggering **81% of the trash in national parks**, with food wrappers topping the category, disrupting ecosystems and contributing to long-term waste due to their resistance to decomposition.

This led me to ask: how might I leverage mycelium-based packaging to reduce single-use plastics, particularly food waste in national parks, while supporting a regenerative environmental agenda?



Research Foundations

This project was informed by research into emerging sustainable packaging systems and circular design theories outlined in **Cradle to Cradle**. Industry innovators demonstrate how mycelium can be used as an alternative to conventional packaging. These precedents helped shape the material direction and conceptual framework behind EcoSpore.



DIELINE

BRAND CONCEPT (WHAT IS ECOSPORE)



Regenerative Materials

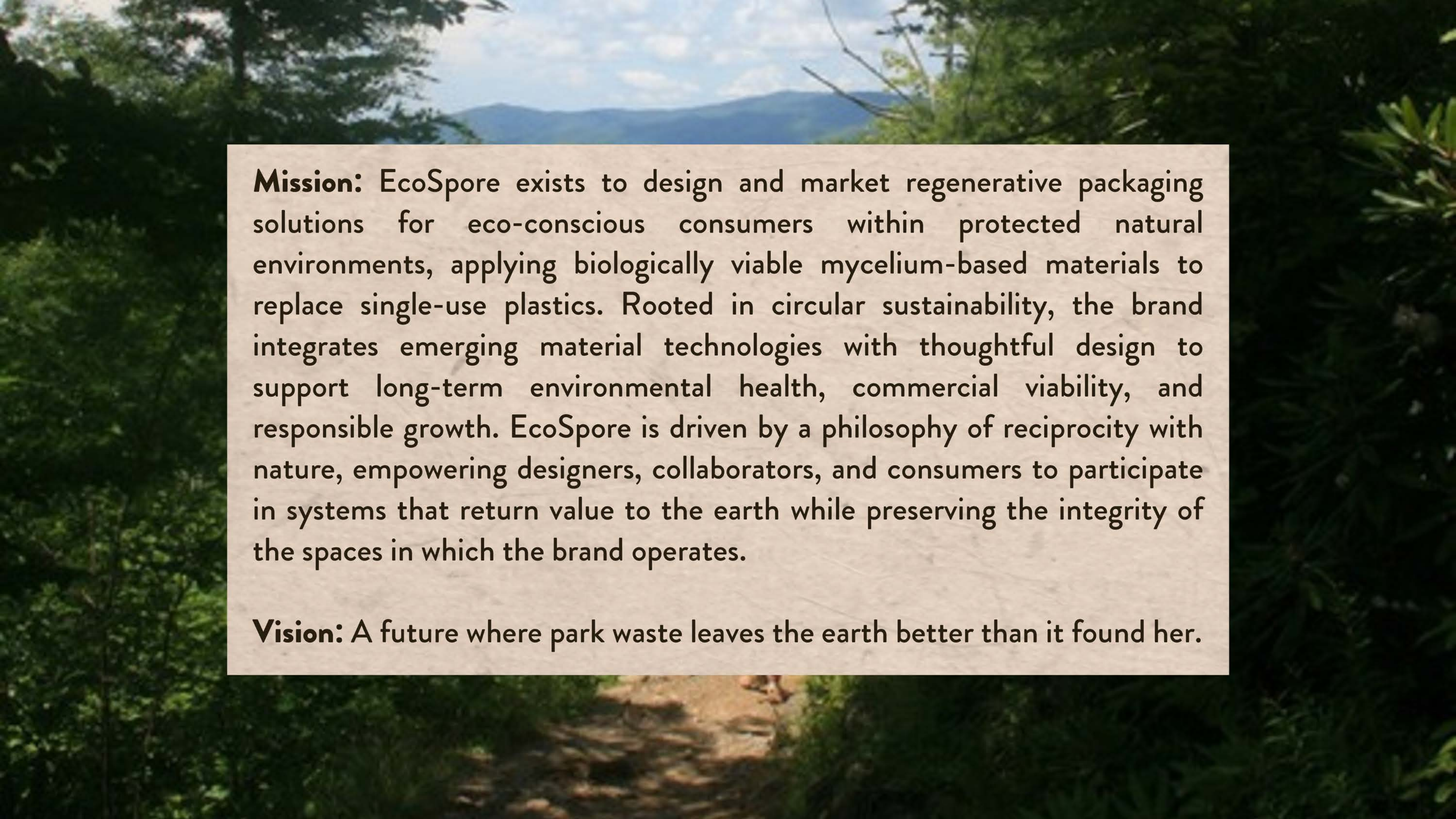


National Parks



Circular Design





Mission: EcoSpore exists to design and market regenerative packaging solutions for eco-conscious consumers within protected natural environments, applying biologically viable mycelium-based materials to replace single-use plastics. Rooted in circular sustainability, the brand integrates emerging material technologies with thoughtful design to support long-term environmental health, commercial viability, and responsible growth. EcoSpore is driven by a philosophy of reciprocity with nature, empowering designers, collaborators, and consumers to participate in systems that return value to the earth while preserving the integrity of the spaces in which the brand operates.

Vision: A future where park waste leaves the earth better than it found her.

SWOT ANALYSIS:

Assessing EcoSpore's internal strengths and market challenges

S

Regenerative material innovation

Alignment with national park and consumer values

Unique brand narrative

Existing technology validation

W

Limited durability and shelf life

Conceptual dependency on proper disposal

Consumer education required

Operational complexity



Scalability within and beyond national parks

Innovation in bio-materials

Corporate sustainability goals

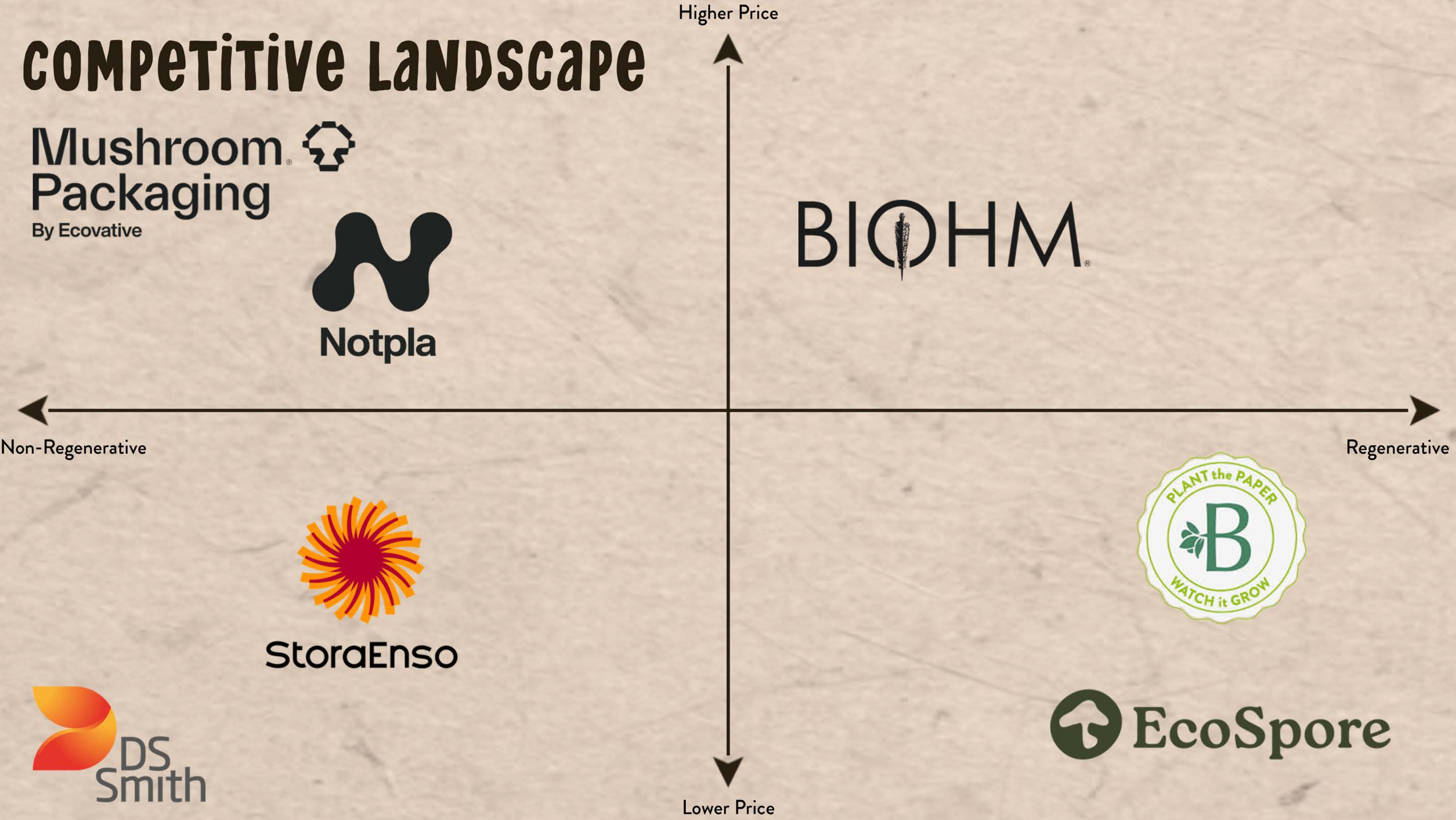
T

Risk of greenwashing skepticism

Regulatory or safety approval challenges

Supply chain instability

COMPETITIVE LANDSCAPE



Mushroom Packaging
By Ecovative



Notpla

BIOHM



StoraEnso

DS Smith



EcoSpore

STRATEGIC GOALS/OBJECTIVES

01 Position Ecospore as a trusted producer of mycelium-based food packaging

- Objective 1 - Increase brand awareness among eco-centric consumers/brands
 - KPI's - 5–10 mentions in sustainability-focused publications within the first year
- Objective 2 - Build credibility and trust in the sustainable packaging space
 - KPI's - Most/all third-party sustainability certifications

02 Launch Ecospore as an exclusive, park-specific sustainable packaging system

- Objective 1 - Establish EcoSpore in select national park retail locations
 - KPI's - 30% of park visitors are aware of EcoSpore products (first year)
- Objective 2 - Ensure consistent seasonal availability as well as product freshness
 - KPI's - 95% of seasonal drops delivered on schedule annually. <5% units spoiled

TARGET MARKET STRATEGY:

Demographics

Ages 18–40, any educational level (is informed on sustainable practices), early-career professionals, and outdoor enthusiasts, income \$30K–\$65K.

Geographic

Frequently travels to U.S. national parks (particularly Redwood, Great Smoky Mountain, and Olympic), purchases in park visitor centers, lives in the U.S.

Psychographics

Eco-centric, environmentally conscious, values regenerative impact over performative sustainability, sees conservation as part of identity.

Behavioral

Willing to pay more for mission-driven products, reads packaging, impulse buys in parks, engages with brands that give back tangibly, is privy to limited-time deals.



TARGET CONSUMER PROFILE



Name: Maya Thompson

Age: 25

Profession: Environmental Studies Grad Student & Seasonal Park Guide

Education: Bachelor's in Environmental Science

Annual Income: \$38,000

Living Situation: Shared rental home with two roommates near a state park

Lifestyle: Maya spends her weekends hiking, camping, and documenting native plants. She shops intentionally, supports local farmers' markets, and avoids brands she considers performative in their sustainability claims. She also follows low-waste content-creators and stays up to date on sustainability initiatives.

MARKETING MIX

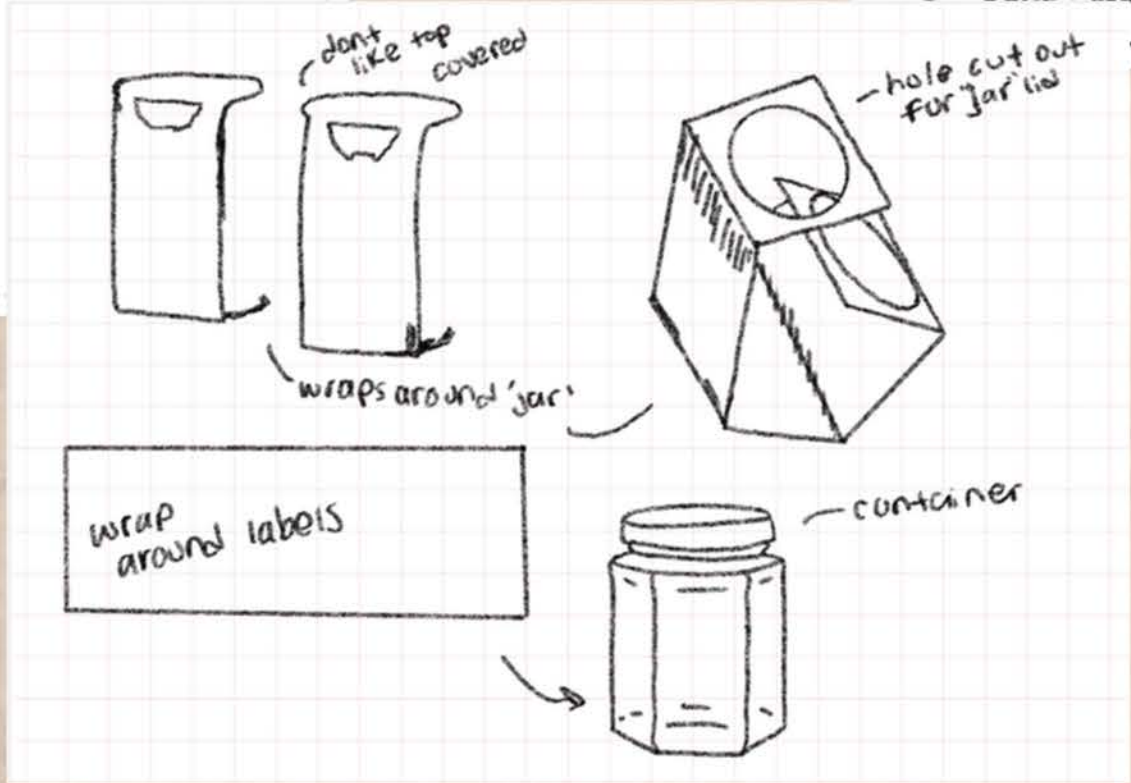
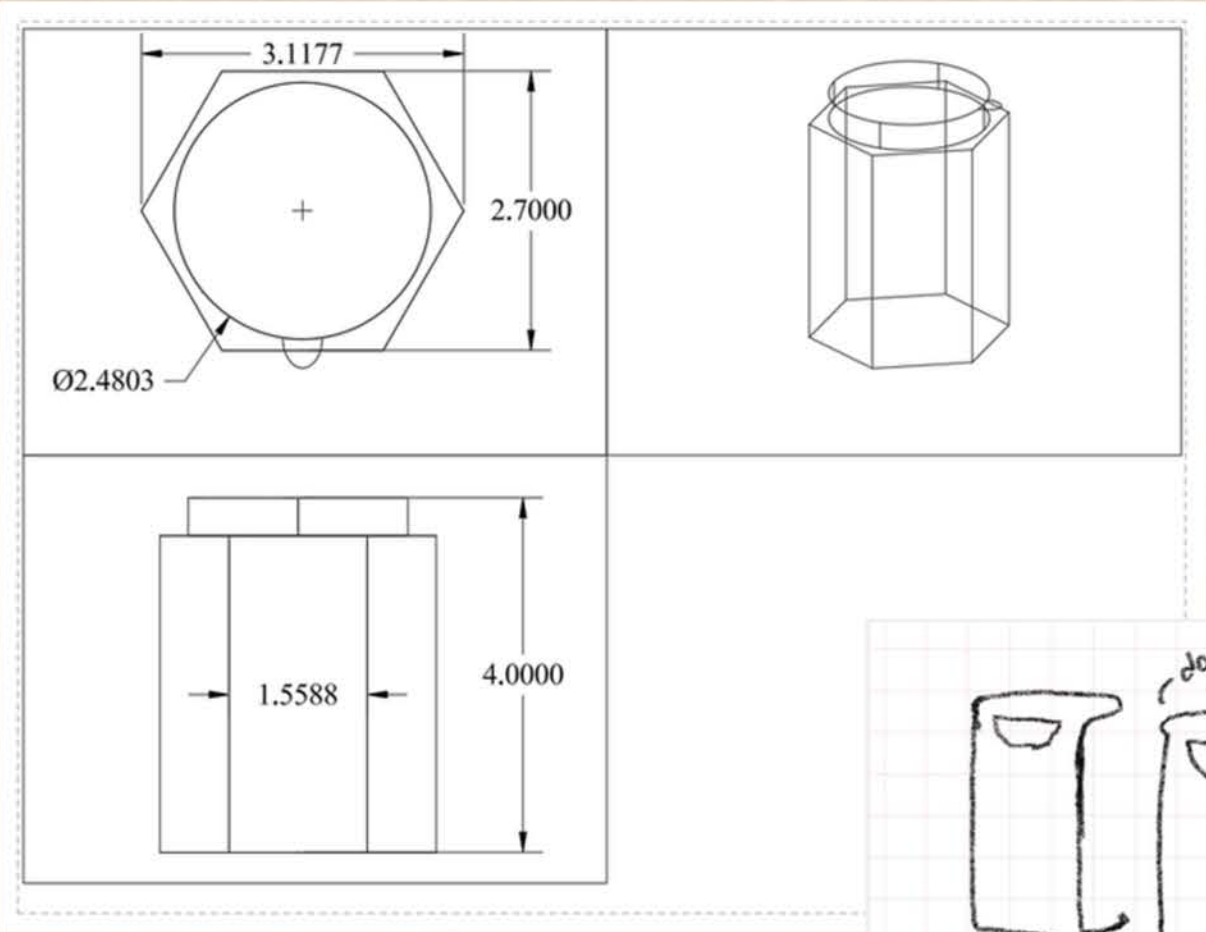
(PRODUCT, PRICE, PLACE, PROMOTION)



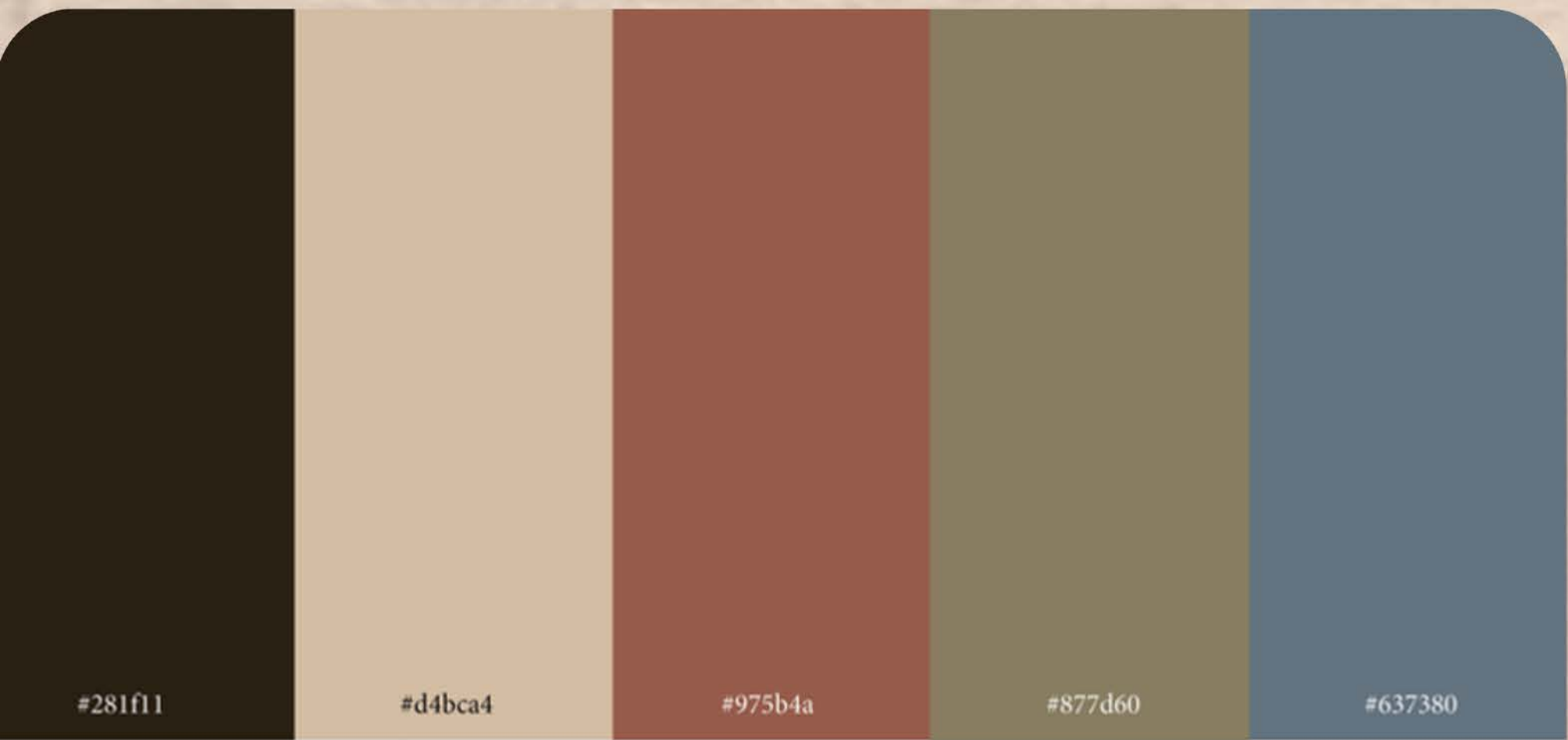
PRODUCT - MOODBOARD



PRODUCT - SKETCHES/AUTOCAD DESIGNS



PRODUCT - BRANDING SYSTEM



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#975b4a

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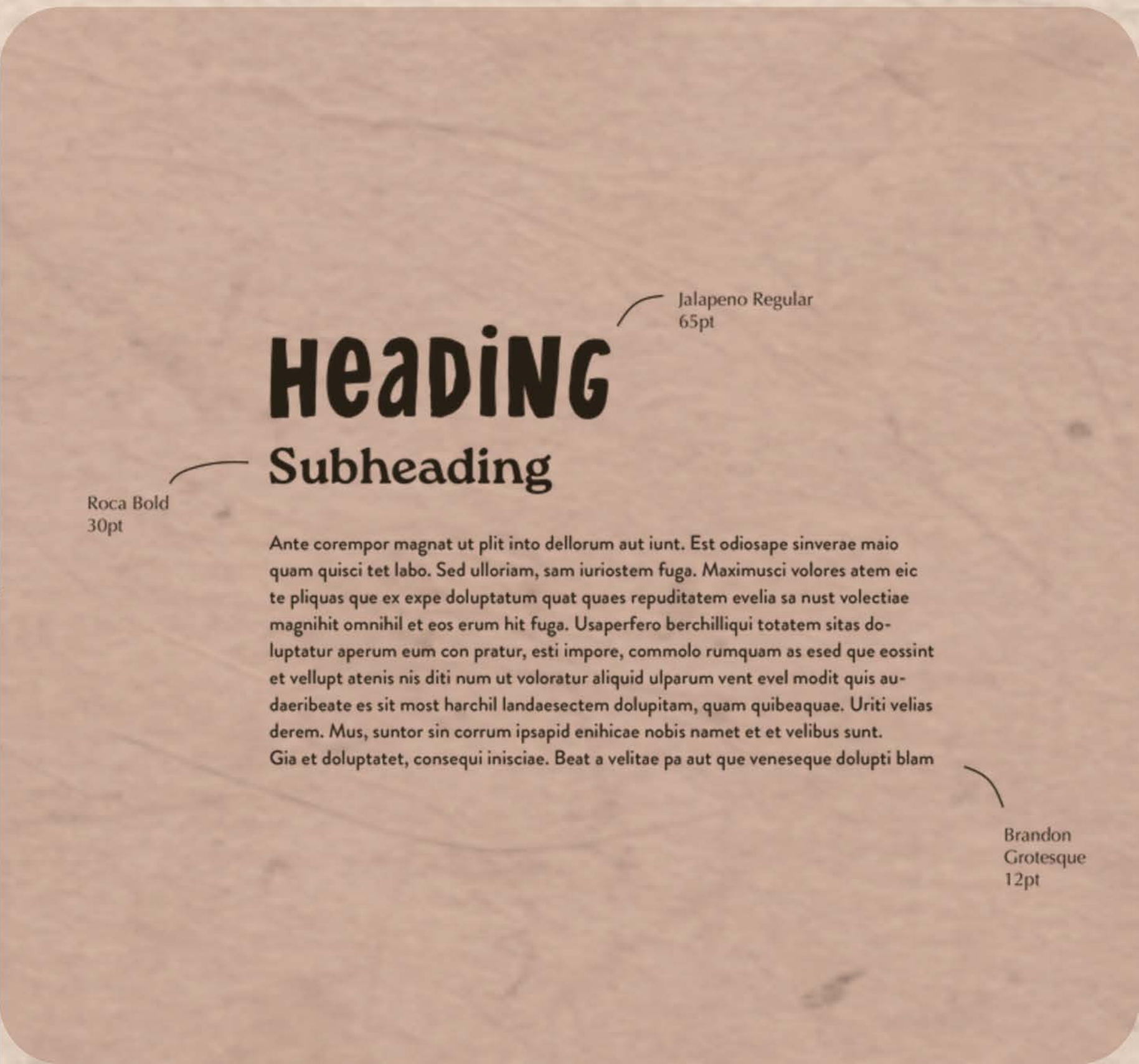
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W

H

 EcoSpore



Heading
Subheading

Roca Bold
30pt

Jalapeno Regular
65pt

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Brandon
Grotesque
12pt

PRODUCT - FLAGSHIP PRODUCT (TRAILHEAD MIX)



PRODUCT - TRAILHEAD MIX DIETLINES



Inside

The band is formed from **pressed mycelium** and colored using **plant-based pigments** to maintain compostability and reduce chemical processing.

Outside



PRODUCT - KEY FEATURES

Ergonomically shaped hexagon

Easily fits in the side pocket
of a hiking backpack

Pull tab to ensure
packaging stays in one piece

Organic structural shape



Price - \$14 Retail

Regenerative material cost
(label wrap and package structure)

Park distribution costs

Cost of food content

Assembly & packaging labor

Retail Margin
(25–35%)



PLACE - DISTRIBUTION STRATEGY/SHIPPING

- Temperature-controlled
- Time-sensitive express shipping
- Coordinated around peak tourism seasons
- Delivered in small, controlled inventory cycles



Shipping

Placement

Placement is **limited-time** and limited to US National Parks where:

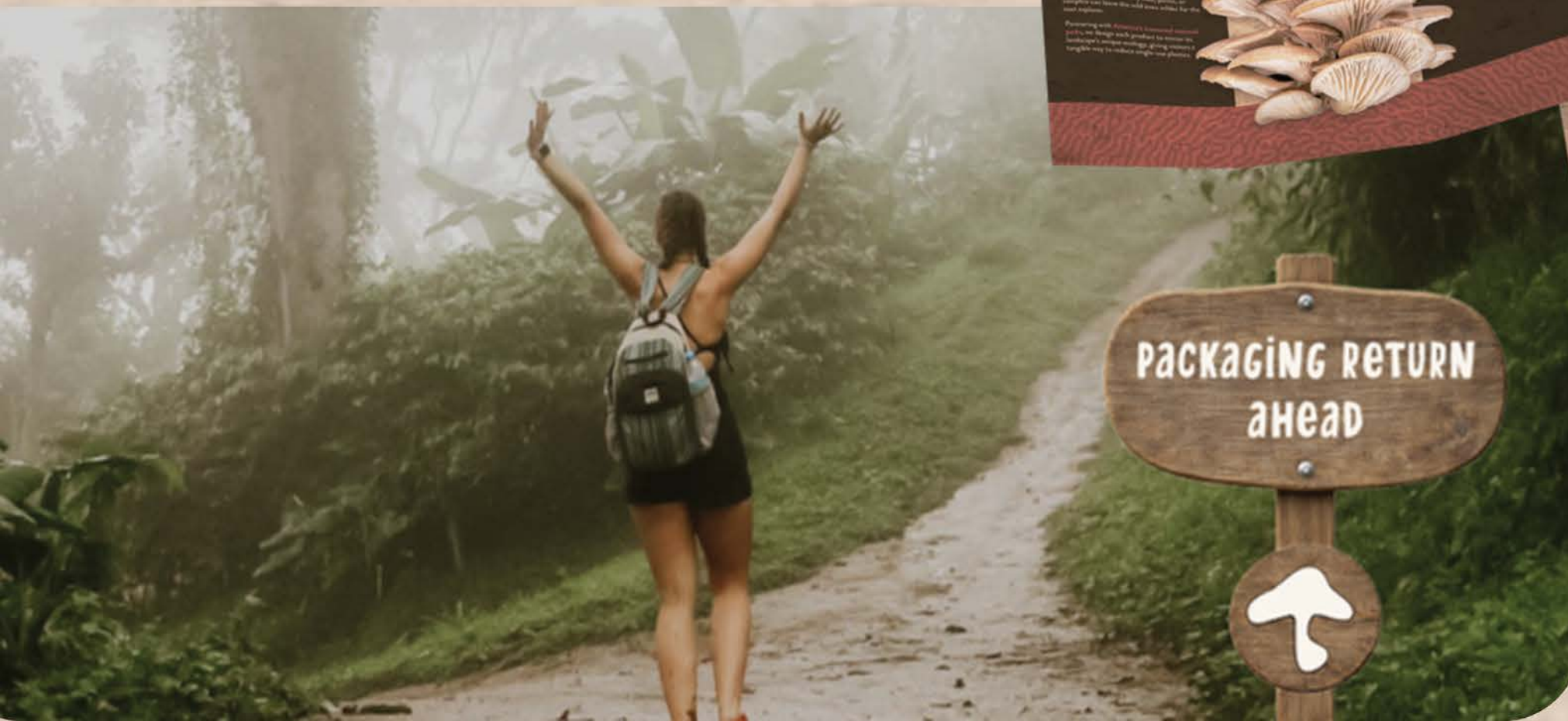
- Mushroom species naturally occur
- Reintroduction aligns with local ecosystems

DTR to begin June 2027



PLACE - RETURN RECEPTACLE

Trail markers guide hikers to EcoSpore **return stations** where used packaging can be returned to the earth. The process is explained simply: drop your container, park rangers redistribute, and growth begins! Informational brochures on the side explain EcoSpore for visitors who **want to learn more**.



PROMOTION - SOCIAL MEDIA



PROMOTION - TRADITIONAL



FUTURE OPPORTUNITIES

Future opportunities lie in the brands ability to **expand to other national parks** in annual drops. Additionally, **sustainable partnerships** can be created to create other mycelium-based packaging products in other protected areas such as state parks and forests.



**THANK YOU FOR SEEING HOW DESIGN
CAN BE GROWN TO GIVE BACK.**

