



# Restoration Barometer

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## Clif Bar

### 2022 Pledge Implementation Progress Report

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# 2022 1T.ORG PLEDGE IMPLEMENTATION PROGRESS REPORT

## Clif Bar

Clif Bar's 2025 Tree Planting Commitment

### Reporting period

January 2021 – December 2021

### Pledge status

Fully on track

### Intervention locations

**United States**

## Progress summary

Since 2004, Clif Bar & Company has partnered with American Forests to restore natural forest habitats on public lands across North America from the Sierra Nevada range to the Appalachian Mountains and from the Great Lakes to the Rio Grande. Clif Bar's support of reforestation efforts – both through volunteer tree planting by Clif employees and through our support of American Forests' restoration projects – is part of our company's mission to plant one million trees by 2025. Since 2004, Clif Bar has planted over 430,000 trees. In 2021, we contributed to that goal by planting approximately 80,000 trees. Based on monitoring that has been conducted to date, our one-year survival rate on these projects is 75%, and we are achieving our stocking targets at each site. We base these estimates primarily on stake row surveys. The majority of these trees, approximately 50,000, were in support of American Forests' work to restore critically endangered white bark pine, a foundation species in alpine areas. American Forests, the U.S. Forest Service (USFS), tribes and other partners have collaborated to identify, grow and plant white barks screened for natural resistance to blister rust (For more see: <https://www.clifbar.com/stories/helping-protect-and-restore-our-forests>).

Additionally, the Clif Bar Baking Company of Indiana partnered with the Indiana Natural Resources Foundation to plant approximately 5,100 trees in the state of Indiana. These trees were a combination of black walnut, red and white oak.





## Implementation method

- On-the-ground restoration through own operations or supply chains
- Financial support to American Forests

## Ecosystems and restoration interventions concerned

- **Forests and woodlands**
  - Planting/seeding corridors of mixed stands of native species
  - Passive natural regeneration
- **Grasslands, shrublands and savannahs**
- **Other**
  - Polar alpine
  - Artificial wetlands
  - Shorelines
  - Anthropogenic shorelines





## Policies and strategies

Clif Bar works to uphold sustainable sourcing practices for our ingredients and packaging. Of the cocoa ingredients we use in our food, 100% is organic or Rainforest Alliance Certified™.

Clif Bar has chosen the Rainforest Alliance certification because its comprehensive social and environmental commitments closely match our company's Five Aspirations business model.

The Rainforest Alliance supports a healthy environment and promotes the well-being of workers and their communities. Certified farms help conserve soil and water, prevent deforestation, and minimise use of pesticides and agrochemicals.

Additionally, Clif paperboard caddies (boxes that hold Clif bars) are certified by the Forest Stewardship Council to ensure sustainable forestry practices.

### Supporting documentation

- [Clif Bar & Company 2021 Annual Report](#)

## Funding

### US\$ 80,000 disbursed towards

- Financing of implementing partner(s)
- Development or purchase of planning or monitoring tools

### Supporting documentation

- [Helping Conserve and Restore Our Forests](#)
- [Clif Bar & Company 2021 Annual Report](#)

## Technical planning

We have chosen to work with leading and recognized non-profit partners such as American Forests and others who use research and climate-smart practices to ensure the right tree is planted in the right place for resilient forests and healthy ecosystems. Planting plans are developed based on decades of established forestry practice and place-based knowledge, while each project has multiple trained foresters overseeing the reforestation process.

Three of the projects, in Idaho and California, are post-fire recovery interventions guided by fire severity mapping. The other two projects, in Canada and Mexico, are guided by the availability of land with willing and interested landowners.

## Ecosystem restoration principles considered

4

Aim to achieve the highest level of recovery for biodiversity, ecosystem health and integrity, and human well-being.

5

Address the direct and indirect causes of ecosystem degradation.

6

Incorporate all types of knowledge and promote their exchange and integration throughout the process.

7

Build on well-defined short-, medium- and long-term ecological, cultural and socio-economic objectives and goals.

8

Tailor to the local ecological, cultural and socioeconomic contexts, while considering the larger landscape or seascape.

9

Include monitoring, evaluation and adaptive management throughout and beyond the lifetime of the project or programme.

10

Build on policies and measures that promote its long-term progress, fostering replication and scaling-up.

### Supporting documentation

- [American Forests Approach](#)



## Monitoring Process

American Forests tracks seedling survival at one and three years, and longer-term monitoring and management are undertaken by place-based land management partners – in this case, the USFS, Essex Region Conservation Authority and community foresters in Mexico. Planting units are also monitored via satellite. We also estimate, but do not typically measure, the future outcomes of interventions, such as the projected carbon outcomes described earlier, using datasets like Forest Inventory and Analysis and iTree as well as published academic literature applicable to each ecosystem.

### Metrics monitored

Restoration intervention progress

Land cover change

Area under restoration

Effects on climate

Financial flows to restoration activities

### Supporting documentation

- [Helping Conserve and Restore Our Forests](#)



## Area of land

### Land replanted totals 251.4 acres (101.7 hectares)

Trees supported / area supported:

- **Idaho, Mesa Fire Reforestation – Payette National Forest:** 15,000 / 91.9 acres (37.2 hectares)
- **California, French Fire Restoration – Sierra National Forest:** 15,000 / 60.0 acres (24.3 hectares)
- **Mexico, Forests for Monarchs:** 15,000 / 33.4 acres (13.5 hectares)
- **Canada, Essex County Former Agricultural Land Planting:** 20,000 / 28.2 acres (11.4 hectares)
- **Idaho, Nez Perce–Clearwater National Forests:** 10,000 / 37.9 acres (15.3 hectares)

Tree planting re-establishes vegetation cover and habitat that was lost through fire or deforestation for agriculture or fuelwood.

- **Sourced from the USFS Lucky Peak Nursery:** ponderosa pine, Douglas fir, white bark pine and western larch
- **Sourced from the USFS Placerville Nursery:** ponderosa pine, incense cedar and sugar pine
- **Sourced from the from the La Cruz Habitat Protection Project Nursery:** smoothbark Mexican pine
- **Sourced from a number of nurseries in Ontario:** sycamore, oak Bur, oak swamp white, oak pin, American elm, oak red, red cedar, hickory shagbark, hickory shellbark, hickory bitternut, hybrid poplar, eastern cottonwood, red osier dogwood, Norway spruce, white spruce, white pine, white cedar, black walnut, oak white, nannyberry, highbush cranberry, black cherry, tamarack, white spruce, tulip tree, silver maple, European larch, freeman maple, yellow birch, white birch, Kentucky coffee tree, elderberry, red pine, American hazel, black gum, buttonbush, hackberry, red maple, black oak, shumard oak, silky dogwood, staghorn sumac, black chokeberry

#### Supporting documentation

- Information compiled by company staff





## Climate

**We estimate that these projects will sequester 15,153 metric tons of carbon dioxide equivalent over the next 50 years.**

Metric tons CO<sub>2</sub>e, above and below ground carbon in trees, at year 50:

- **Idaho, Mesa Fire Reforestation – Payette National Forest:** 4,935
- **California, French Fire Restoration – Sierra National Forest:** 4,350
- **Mexico, Forests for Monarchs:** 1,273
- **Canada, Essex County Former Agricultural Land Planting:** 2,641
- **Idaho, Nez Perce–Clearwater National Forests:** 1,954

### Estimation method

We estimate carbon storage for each project based on above and belowground storage in trees at year 50, with data from the publicly available Forest Inventory and Analysis dataset collected by the USFS, using standards and guidelines developed by the California Air Resources Board's California Climate Investments programme. These estimates are not verified with field measurements and they do not account for the 'without-project' scenario (e.g. comparing the carbon gains from the planting to the no-planting baseline scenario).

### Supporting documentation

- [Clif Bar & Company 2021 Annual Report](#)



## Biodiversity

Of the total land area under restoration, 100% aims to recreate, enrich or protect native, primary or intact ecosystems.

Of the land area, 189.9 acres (76.8 hectares) or 75% is federally protected, and the remaining 61.6 acres (24.9 hectares) or 25% are protected under easements or covenants.

Clif Bar's funding of tree planting programmes in 2021 supported American Forests and their work to restore the critically endangered white bark pine, a foundation species in alpine areas. American Forests, the USFS, tribes, and other partners have collaborated to identify, grow and plant white barks screened for natural resistance to blister rust. The projects funded in partnership with Clif bar and American Forests span multiple areas of restoration. Impacts achieved include reforestation in areas affected by fire and re-establishing forest vegetation in areas where salvage harvest was completed, re-establishing conifer forests along the scenic byway, and expanding conservation areas to benefit monarch butterflies and diverse endemic species.

### Supporting documentation

- [Helping Conserve and Restore Our Forests](#)

## Economy

**Based on US\$ 75 thousand invested in reforestation, 2.9 jobs created or supported.**

We emphasise reforestation on public land to ensure broad access to the sites and the benefits that they provide, work with government agencies and local communities to ensure buy-in and public support, and employ local workers at every stage possible.

### Types of jobs supported

- Seasonal / occasional / casual
- Long-term

### Benefiting stakeholders

- Indigenous peoples and/or local communities
- Government officials
- Migrant workers under the H2B programme, nursery workers, seed collectors and public and private foresters

### Supporting documentation

- [Data from Saha, D., Leslie-Bole, H. and Cyr, T., 2021. The Economic Benefits of the New Climate Economy in Rural America.](#)





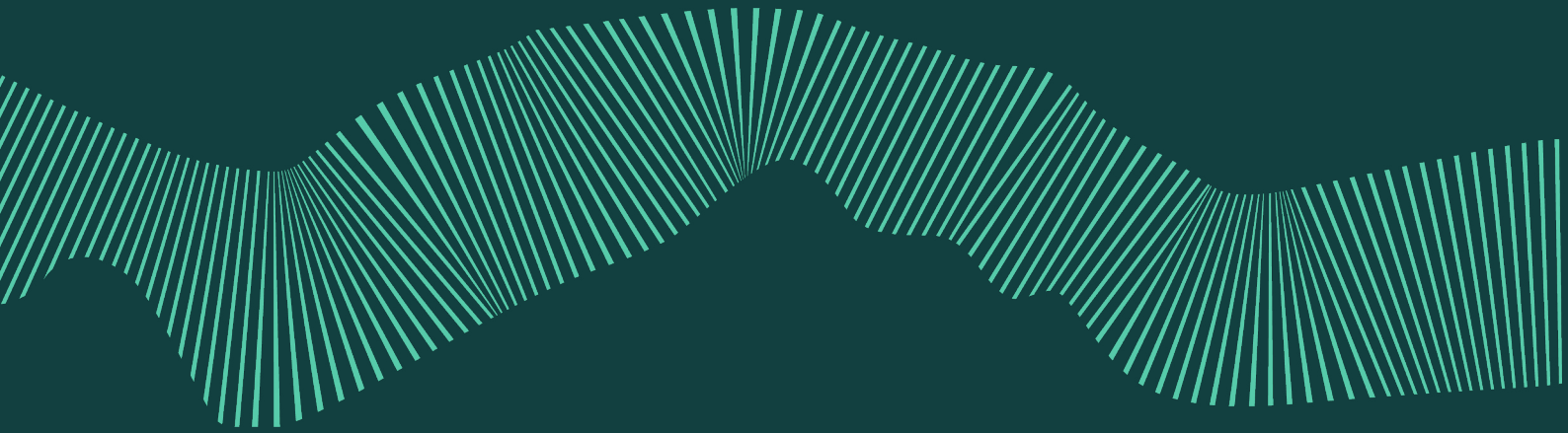


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