

1st International Multidisciplinary Acorn as Food Workshop

ACORN 2024

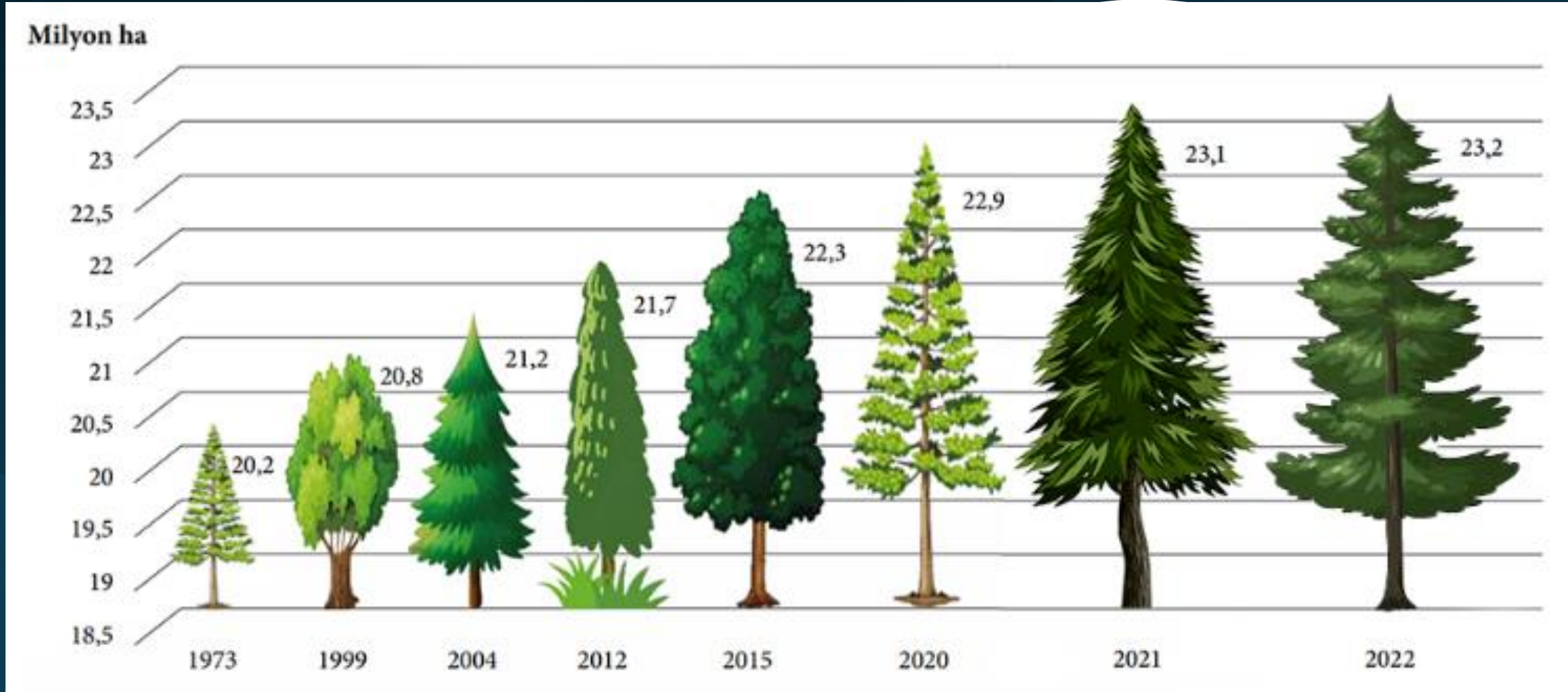
**17-18 DECEMBER,
2024**

İTÜ



TÜRKİYE'S FOREST ASSETS

Türkiye's Forest Existence from Past to Present



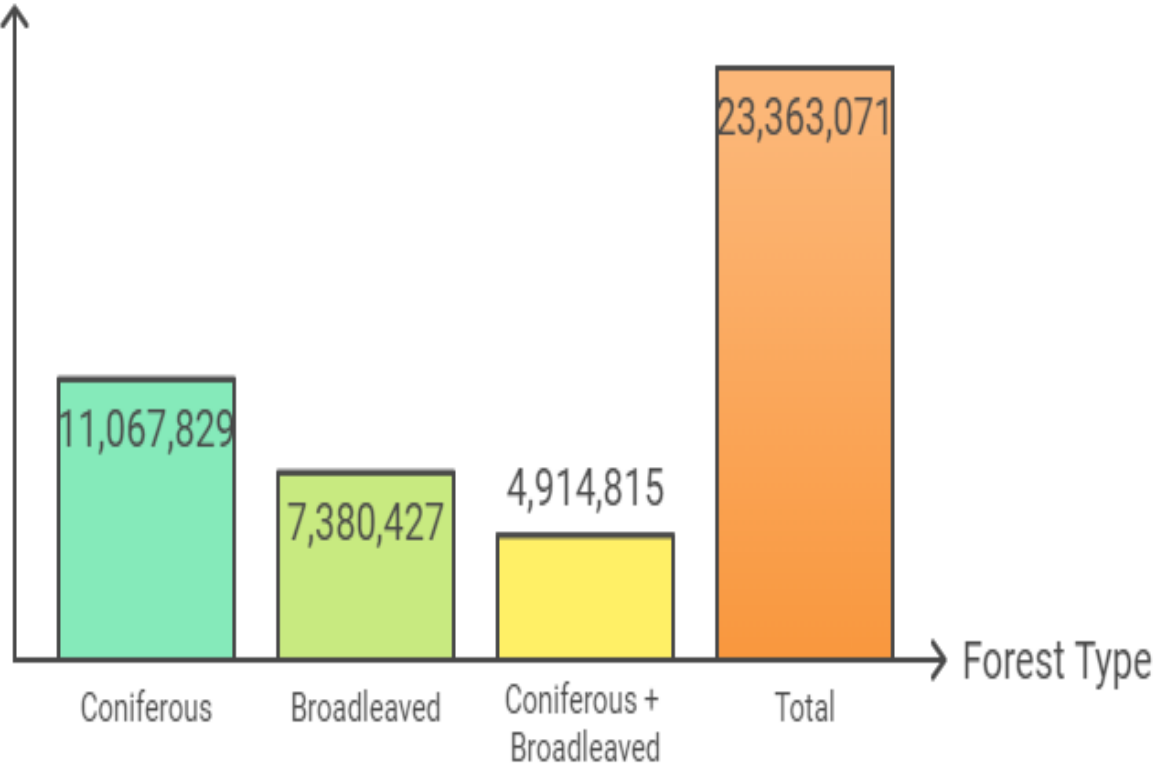
Türkiye's forest assets have increased to **23.3 million** hectares by the end of 2023

ACORN 2024

TÜRKİYE'S FOREST ASSETS



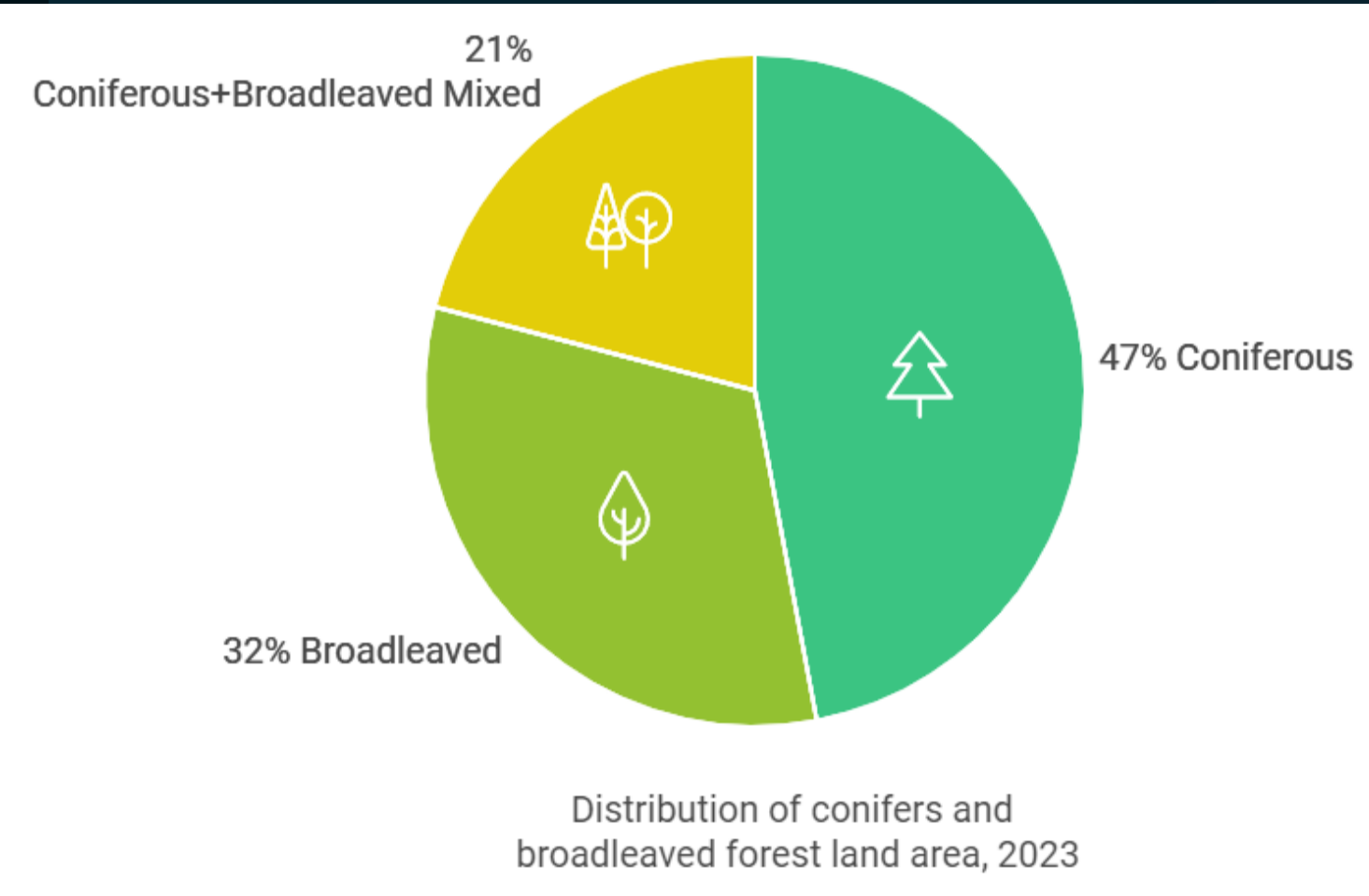
Area (hectare)



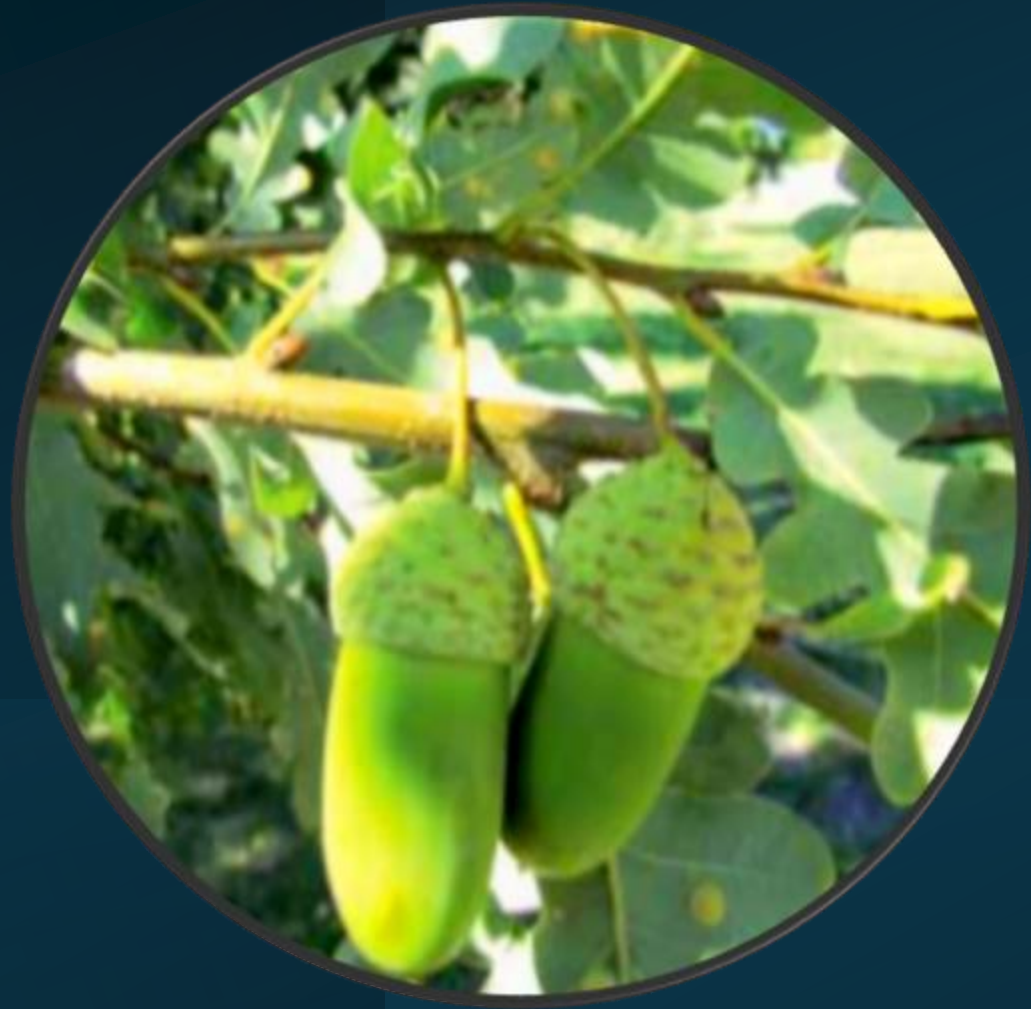
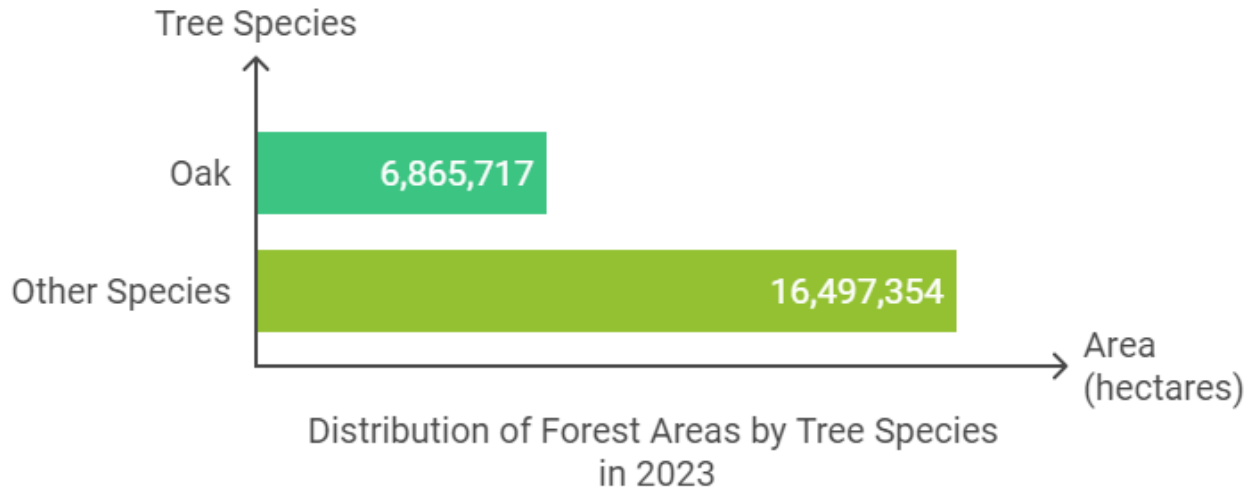
Distribution of conifers and broadleaved forest land area, 2023



TÜRKİYE'S FOREST ASSETS



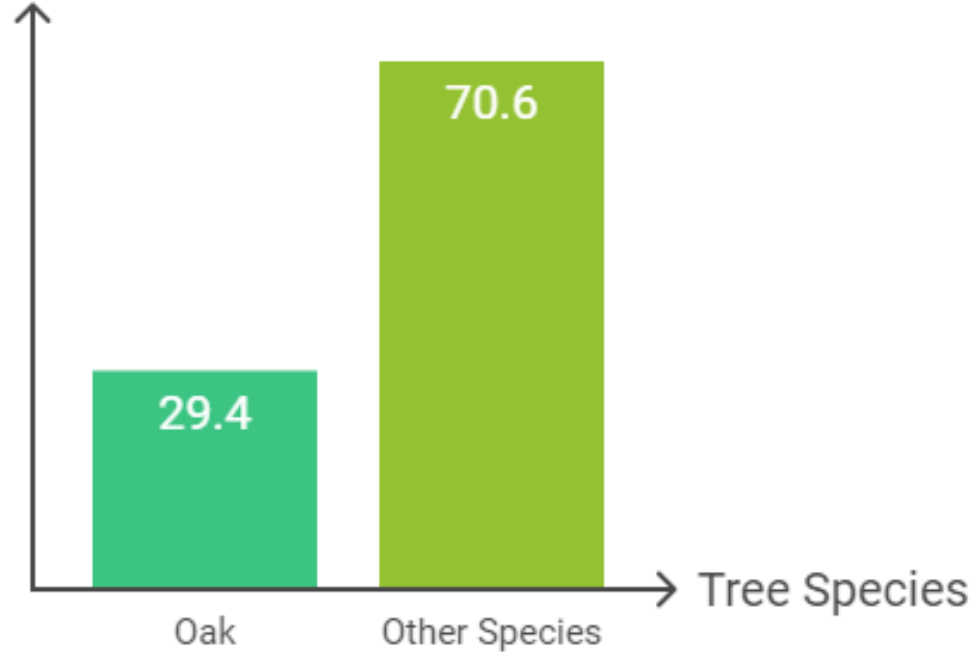
TÜRKİYE'S FOREST ASSETS



TÜRKİYE'S FOREST ASSETS



Percentage of
Forest Area



Forest Area Distribution by Tree Species in
2023



TÜRKİYE'S FOREST ASSETS



White
Oaks

1 *Quercus robur* (Saplı Meşe)

- subsp. *robur*



3 *Quercus petraea* (Sapsız Meşe)

- subsp. *petraea*



4 *Quercus Infectoria* (Mazı Meşesi)

- subsp. *infectoria*



5 *Quercus frainetto* (Macar Meşesi)



- subsp. *pedunculiflora*



- subsp. *iberica*



- subsp. *boissieri*



7 *Quercus vulcanica* (Kasnak Meşesi)



2 *Quercus pubescens* (Tüyüklü Meşe)



- subsp. *pinnatifida*



5 *Quercus hartwissiana* (Istranca Meşesi)



8 *Quercus pontica* (Doğu Karadeniz Meşesi)



9 *Quercus macranthera* subsp. *suspiriensis* (Ispir Meşesi)



TÜRKİYE'S FOREST ASSETS



Red Oaks

1 *Quercus tralana* (Makedonya/ Kazdağı/ Truva Meşesi)

- subsp. *triviana*



- subsp. *yaltiriki*



2 *Quercus cerris* (Saçlı Meşe)

- var. *cerris*



- var. *austriaca*



3 *Quercus libani* (Lübnan Meşesi)



4 *Quercus brantii* (Kara Meşe)



5 *Quercus ithaburensis* subsp. *macrolobis* (Anadolu Palamut Meşesi)



Evergreen Oaks

1 *Quercus coccolifera* (Kermes Meşesi)



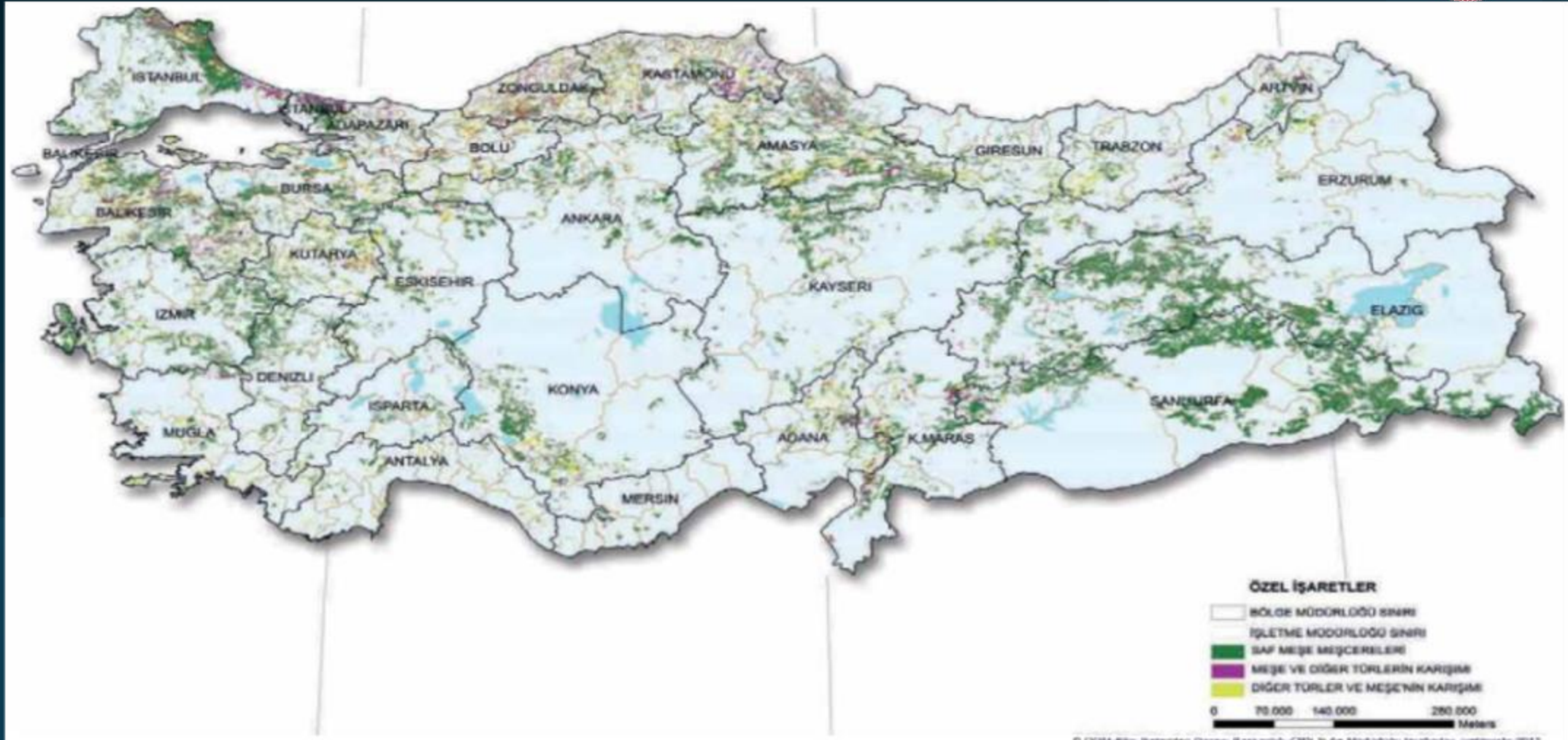
2 *Quercus aucheri* (Boz Pınal Meşesi)



3 *Quercus ilex* (Pınal Meşesi)



Oak Distribution Map



Türkiye is an oak paradise both in terms of species diversity and the area it covers. Covering an area of 6.8 million hectares, the oak tree has survived for thousands of years with 18 species.

ACORN ACTION PLAN



The Acorn Action Plan, implemented by the General Directorate of Forestry in 2022, aimed to increase acorn production by using Türkiye's forest resources more efficiently.

USAGE AREAS OF ACORN



Acorn's Industrial Impact

Leather Industry



Textile Industry



Food Industry



Acorn's Versatility



PRODUCTS OBTAINED FROM ACORN AND AREAS OF USE



VALEX (Valonia)

- ✓ Valex (Valonia) is a powdered substance used in leather tanning.
- ✓ It is used extensively in the leather and textile industry, especially as a vegetable tanning agent and dye.
- ✓ High quality valex production in the world is only made in Türkiye.
- ✓ Annual valex production in our country is around 1,300 - 1,500 tons, and the majority of this amount is exported.



PRODUCTS OBTAINED FROM ACORN AND AREAS OF USE



PELLET

- ✓ Pellets are biofuels made from compressed organic matter or biomass.
- ✓ After the fuel product obtained from bonito pulp is processed, the resulting pulp is dried, crushed and compressed.
- ✓ Pellets are a fuel type with very high combustion efficiency due to their high density and low moisture content.



PRODUCTS OBTAINED FROM ACORN AND AREAS OF USE



ACORN

- ✓ Acorn is used as animal feed, fuel, food additive and sometimes as fertilizer.

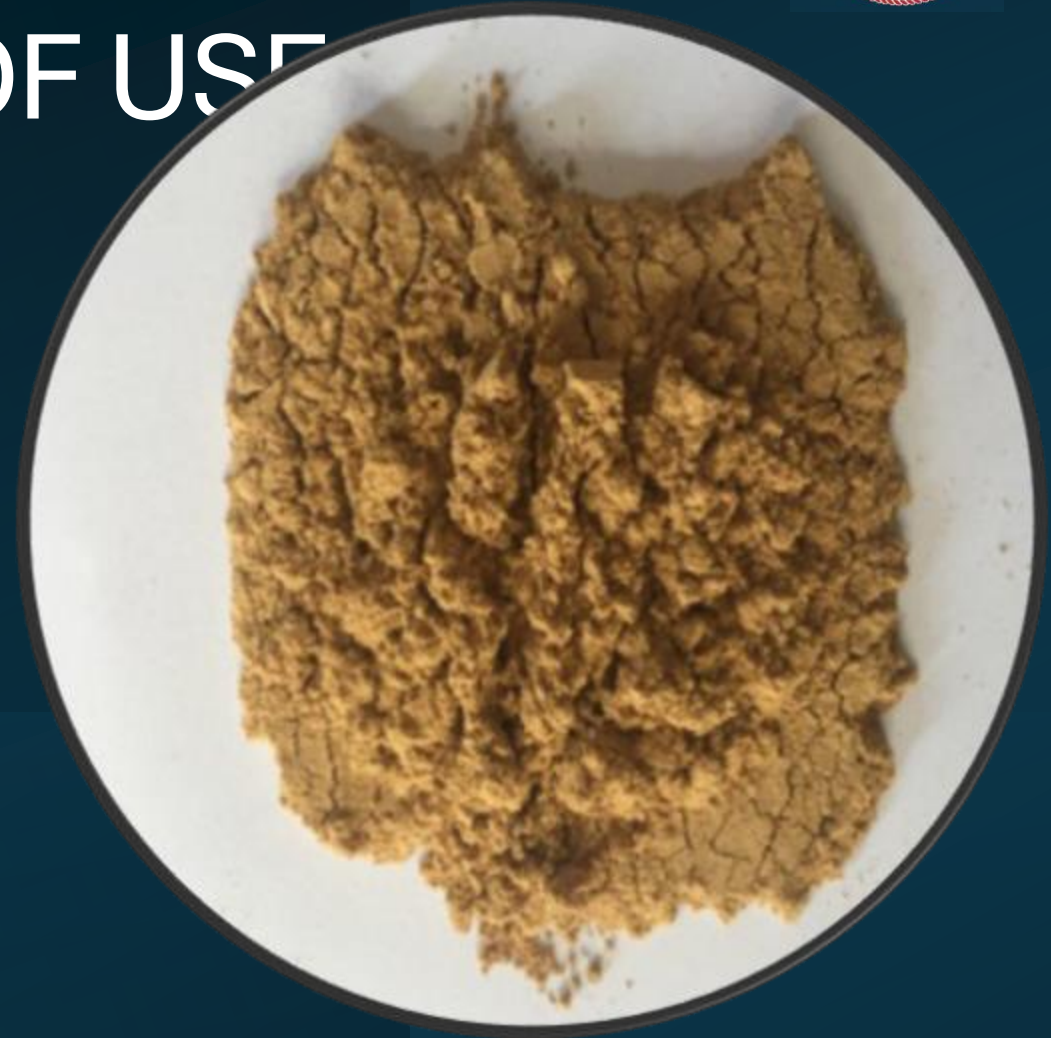


PRODUCTS OBTAINED FROM ACORN AND AREAS OF USE



ACORN FLOUR

- ✓ Acorn flour is a product obtained by turning collected acorn into flour through various stages.
- ✓ It is used as a natural food ingredient in the form of a gluten-free flour.



PRODUCTS OBTAINED FROM ACORN AND AREAS OF USE



ACORN CUP

- ✓ The acorn cup is the outer part that covers the acorn. The cup contains 33-35% tannin and the nails contain 43-45% tannin.
- ✓ Tannin is used as a tanning agent in the leather industry.
- ✓ In addition, the cup waste left after tannin production can be used in mushroom cultivation.



ACTIVITIES TO BE CARRIED OUT WITH THE ACORN ACTION PLAN



**Training of
Resource
Managers and
Collectors**

Making Utility Plans

**Conducting
Research on the
Development of
Acorns in Their
Natural
Environment**

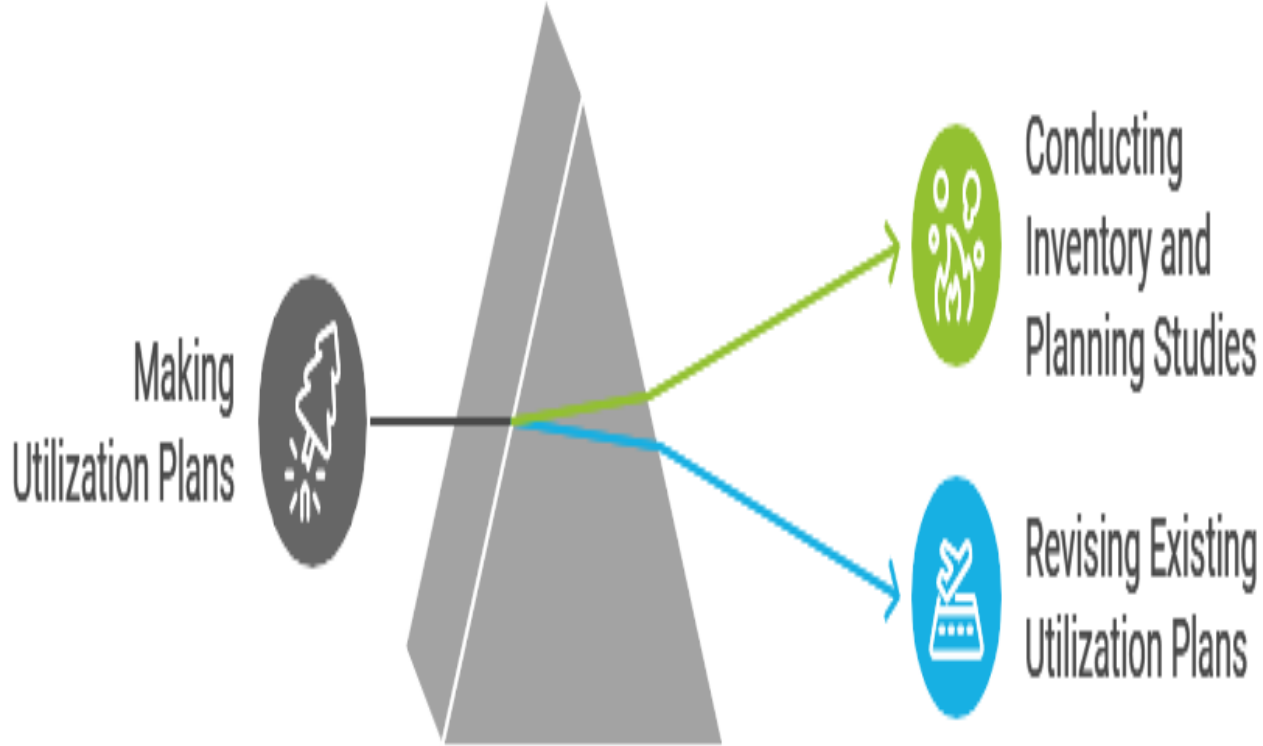
**Conversion of Acorn
Areas into Acorn
Management Class**

**Increasing Acorn
Production Amounts**

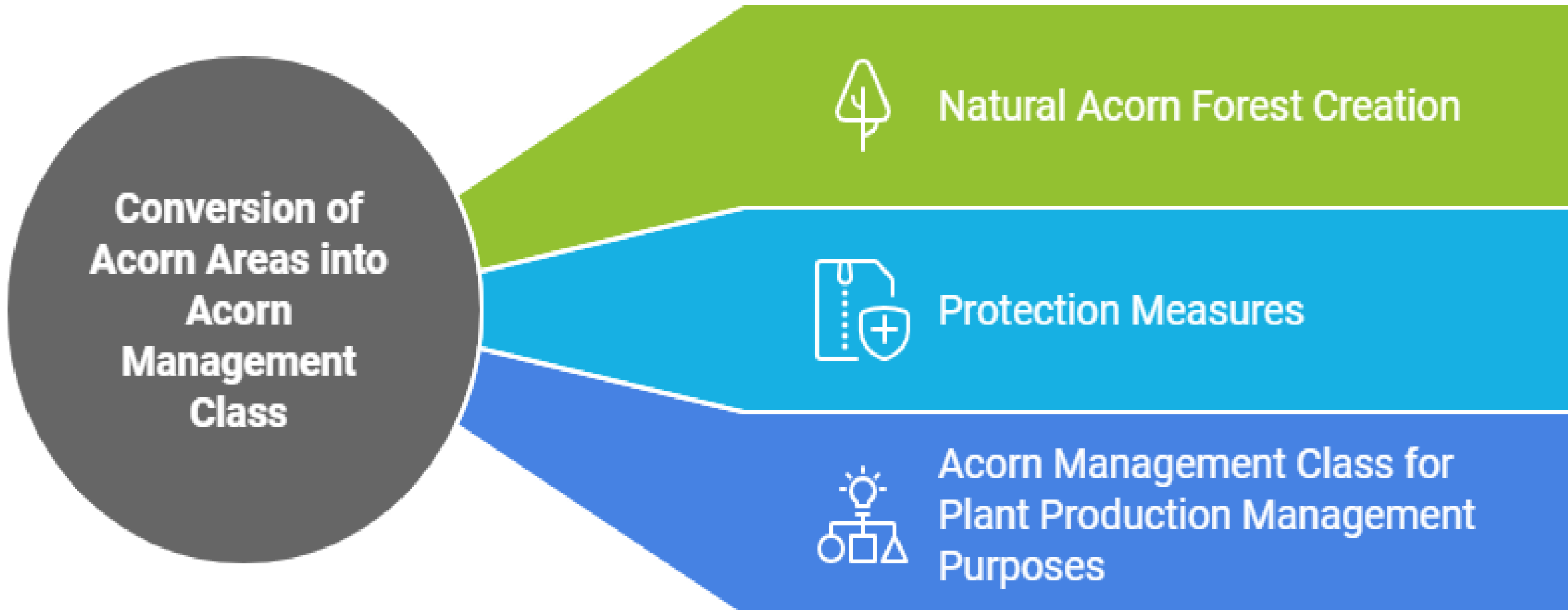
**Living Cover
Cleaning**



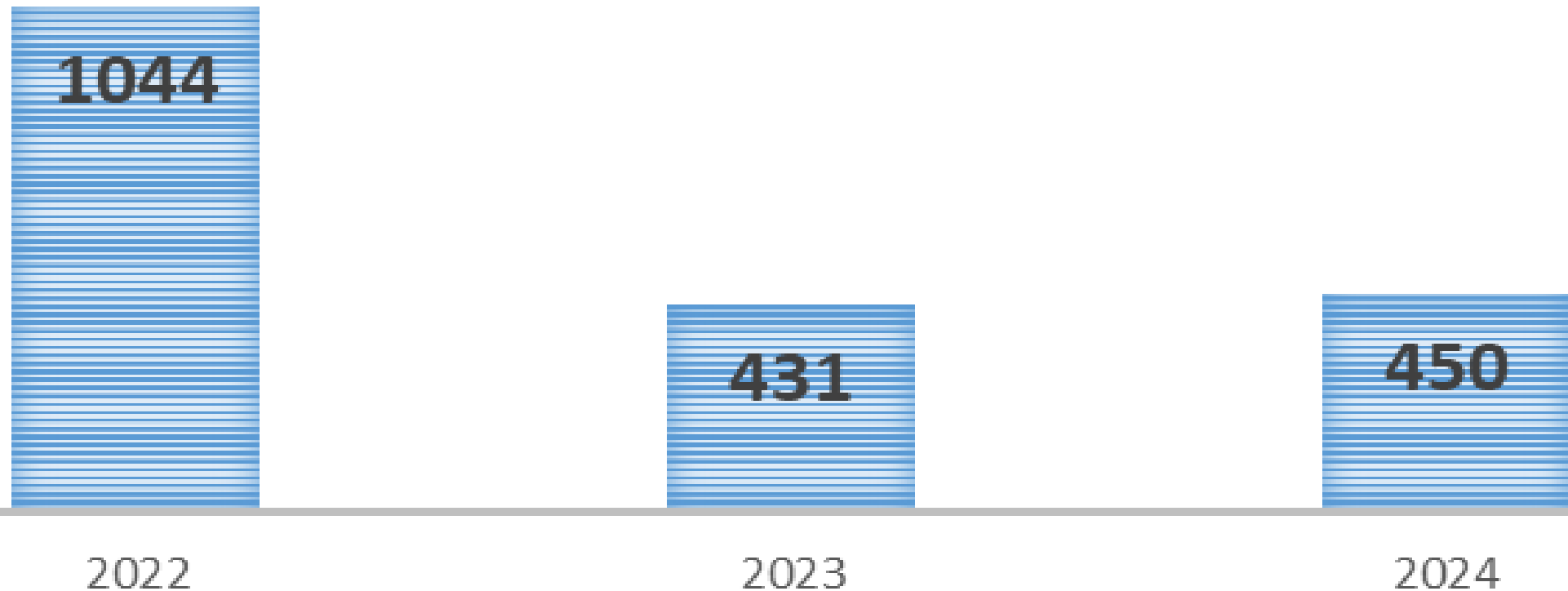
ACTIVITIES TO BE CARRIED OUT WITH THE ACORN ACTION PLAN



ACTIVITIES TO BE CARRIED OUT WITH THE ACORN ACTION PLAN



CONVERSION OF ACORN AREAS INTO ACORN MANAGEMENT CLASS



ACTIVITIES TO BE CARRIED OUT WITH THE ACORN ACTION PLAN



Living Cover Cleaning

In areas where acorns are densely populated and collected, the area will be cleaned of live vegetation to facilitate collection work prior to utilization.

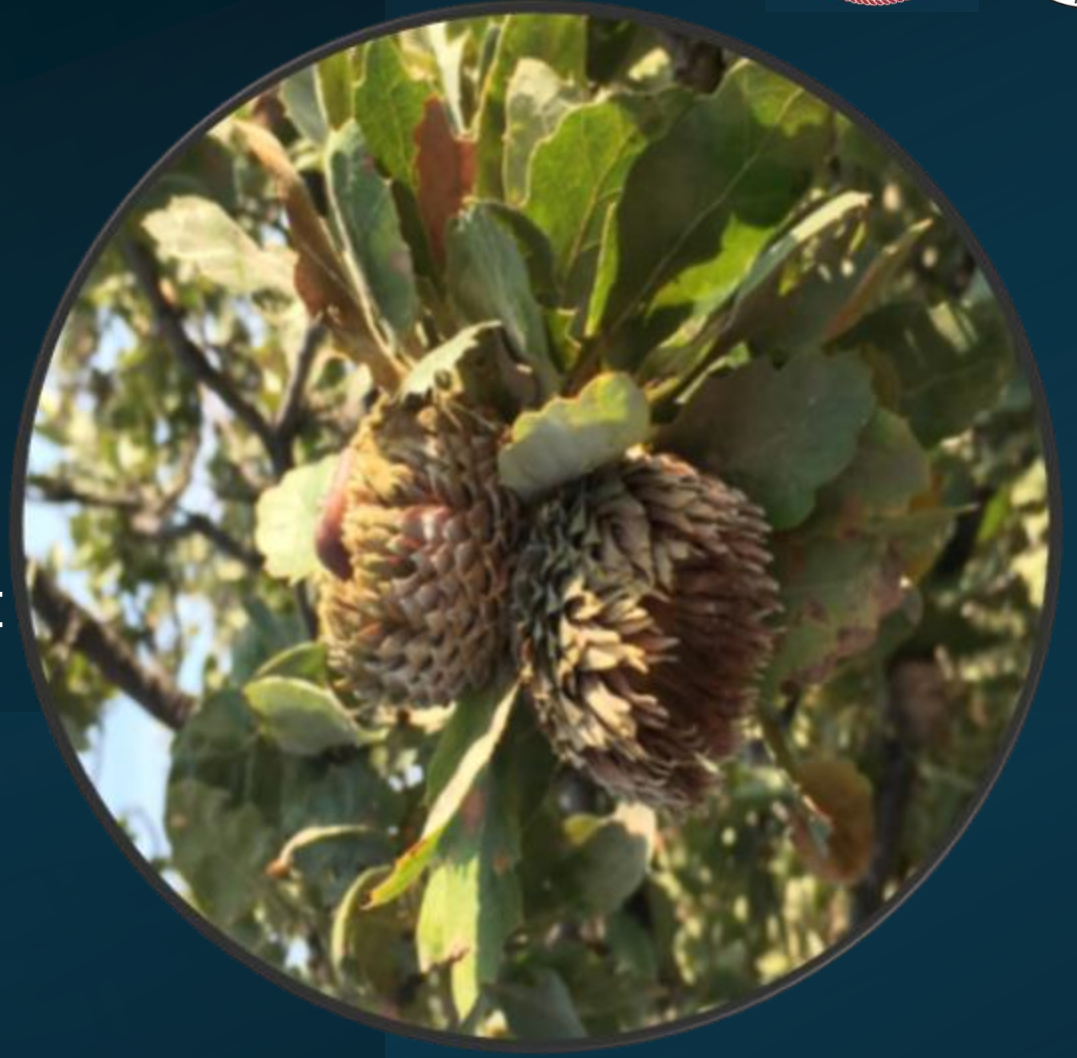


ACTIVITIES TO BE CARRIED OUT WITH THE ACORN ACTION PLAN



Increasing Acorn Production Amounts

Acorns will be collected in the amount and time foreseen by the utilization plans for sustainability.

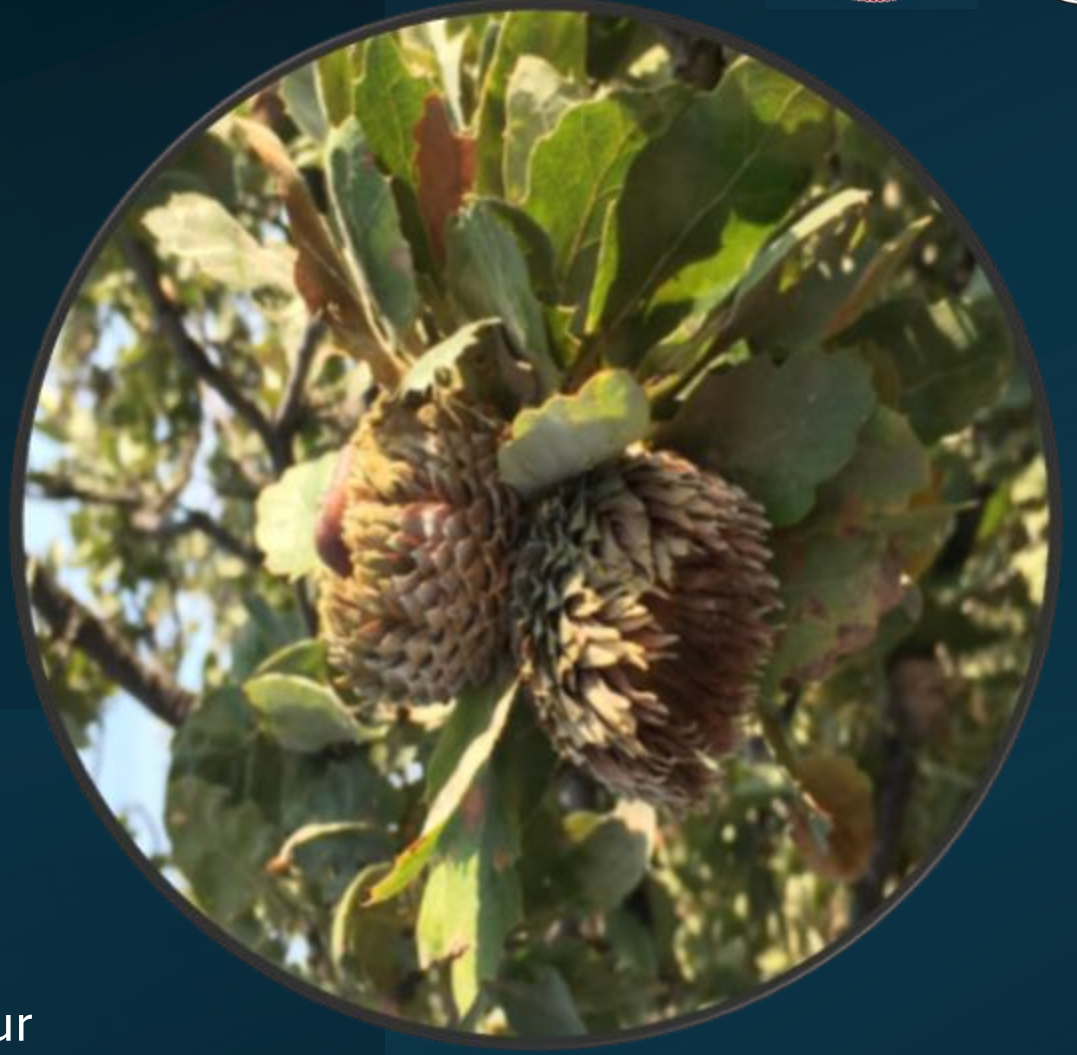


ACTIVITIES TO BE CARRIED OUT WITH THE ACORN ACTION PLAN



Conducting Research on the Development of Acorns in Their Natural Environment

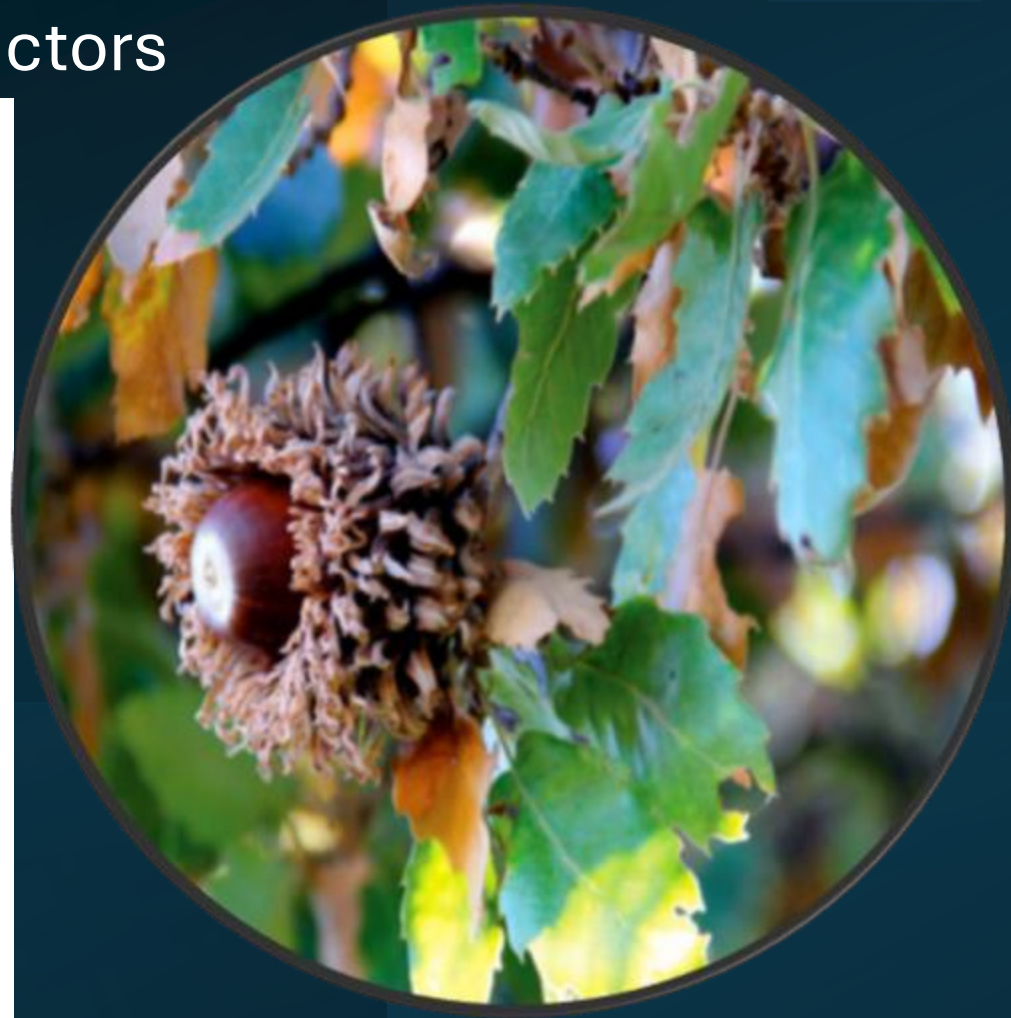
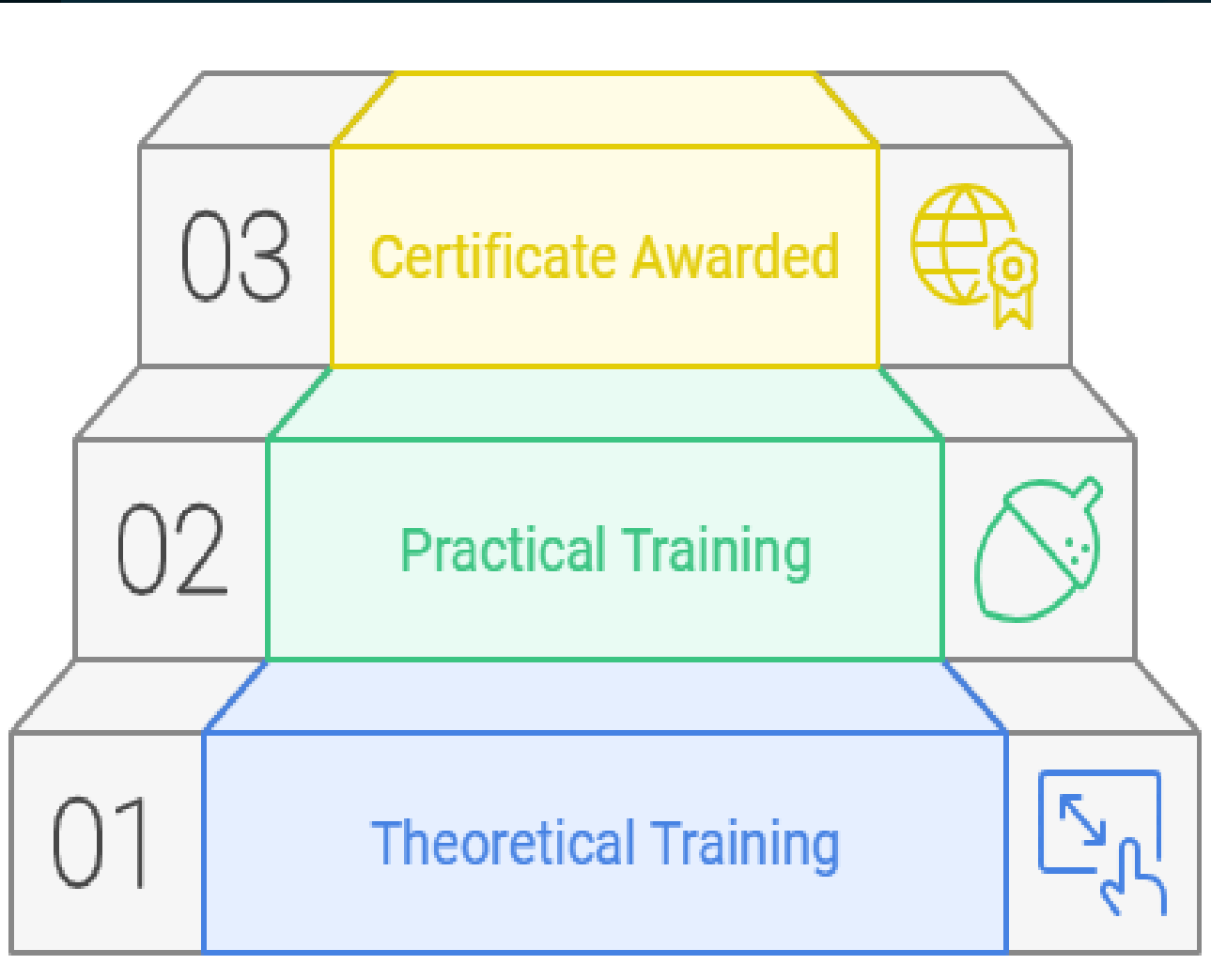
Our General Directorate Forestry Research Institute Directorates will increase institutional capacity by conducting research on issues such as the development of acorns in their natural environment and their economy together with other research organizations and universities in the field of work of our Directorates, and will be put into practice.



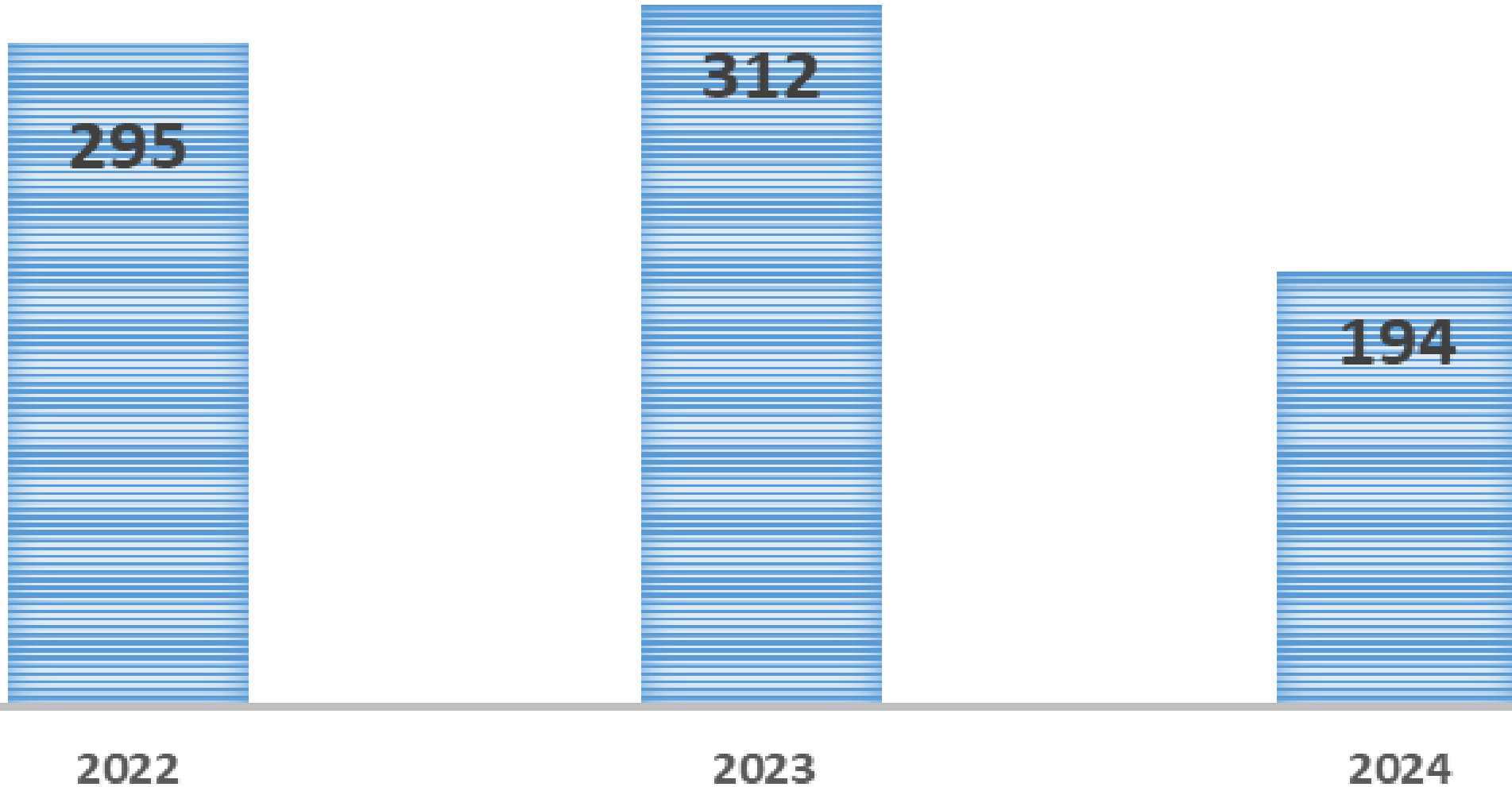
ACTIVITIES TO BE CARRIED OUT WITH THE ACORN ACTION PLAN



Training of Resource Managers and Collectors



NUMBER OF PEOPLE TRAINED





THANK YOU FOR YOUR ATTENTION

Hüseyin TÜRKSOY
General Directorate of
Forestry

ACORN 2024