

# Hai-Bar Carmel Nature Reserve


www.parks.org.il | +3639 | 

BUY AN ISRAEL NATURE AND PARKS AUTHORITY SUBSCRIPTION FOR UNLIMITED FREE ENTRY TO 55 NATIONAL PARKS AND NATURE RESERVES.



## Nearby Sites:



www.parks.org.il | +3639 |   
Hai-Bar Carmel, Tel: 04-8320348

## Nearby Trails

You'll find some of the most beautiful trails in Israel near Hai-Bar Carmel.

**From Wadi Galim to Wadi Kelah:** Beginning near the Hai-Bar, this trail takes you down Wadi Galim and up Wadi Kelah to the Little Switzerland picnic area or Damun Junction.

**Wadi Galim:** This trail begins near the Hai-Bar, passes En Kedem and ends at Tirat Carmel.

**Wadi Kelah:** This short and pleasant loop trail takes you to the Carmel's famous geological notch.

**HaArbaim Grove:** This easy trail leads to a grove of old Palestine oaks.

## Opening Hours

Hai-Bar Carmel is open to visitors on Saturdays and holidays. Mid-week visits may be arranged by reservation for groups only.

**Sunday–Thursday:** Summer: 8:00–17:00 Winter: 8:00–16:00

**Saturdays and holidays:** Summer: 8:00–16:00 Winter: 8:00–15:00

Entry is permitted up to one hour before closing time.

To reserve a visit: haybar@npa.org.il

## Rules of Behavior

Please follow these rules:

- Do not harm flora, fauna or inanimate objects.
- Pets are not allowed.
- Do not bring food into the reserve.
- Visitors are allowed in the reserve only during opening hours.
- Walk only on official trails.
- Do not feed the animals in the reserve.
- Do not insert your hands into the enclosures and do not cross fences.
- Lighting fires is prohibited.
- Some sections of the trail are steep.
- Maintain quiet around the animals.
- Keep the area clean.

**Text:** Yaacov Shkolnik

**Translation:** Miriam Feinberg Vamosh

**Photographs:** Eyal Bartov, Dotan Rotem, Adi Ashkenazi, Ehud Hilberger, INPA Archive

**Production:** Adi Grinbaum

© Israel Nature and Parks Authority

## Welcome to Hai-Bar Carmel

Large mammals and raptors are the most sensitive link in nature. Animals that inhabited this country for hundreds of thousands of years have disappeared since the late nineteenth century due to habitat destruction, hunting, poisoning and electrocution. Leopards, wolves, bears, roe deer, Griffon vultures and Egyptian vultures – these were all once an inseparable part of the living world of the Carmel, the Galilee and other areas, but have become extinct or endangered here in modern times.

Hai-Bar Carmel was established to correct this situation as much as possible. The main goal of Hai-Bar Carmel is to create breeding nuclei of herbivores and raptors and provide conditions for them to reproduce that are as close as can be to their natural habitat. Animals from these breeding nuclei are reintroduced to the wild in Israel. Another Hai-Bar, with a similar objective, is located at Yotvata in the Arava. In both places, species of animals are raised that are globally endangered.

### Hai-Bar Carmel

Hai-Bar Carmel was founded in 1973 in the Mount Carmel Nature Reserve. In this area of well-developed Mediterranean woodlands, the Israel Nature and Parks Authority maintains, protects and monitors the natural environment to foster species that have been selected for reintroduction to the wild.

Hai Bar Carmel invites the public to participate in the experience of reintroducing animals to the wild. On Saturdays and holidays, INPA rangers take visitors on guided tours (at no cost beyond the entrance fee). On the tour, visitors learn about the way of life of the animals that live here and the enormous efforts invested in reintroducing them to the wild in Israel.



Griffon vulture

## Mammals in the Hai-Bar

Five species of mammals are raised in spacious reproduction enclosures here: Persian fallow deer (*Dama dama mesopotamica*), roe deer (*Capreolus capreolus*), Palestine mountain gazelle (*Gazella gazella gazella*), armenian wild sheep (*Ovis orientalis*) and Cretan goat (*Capra aegagrus cretica*). In one verse, the Bible mentions seven species of herbivores that are considered kosher as food: "The deer, the gazelle, the roebuck, the wild goat, the ibex, and the antelope, the mountain-sheep" (Deut. 14:5). Some scholars believe that mountain-sheep, *zamer* in Hebrew, was actually a giraffe!

The Persian fallow deer and the roe deer that once inhabited this country have become extinct. But herds from the breeding nuclei fostered at Hai-Bar Carmel have been reintroduced to the wild: the fallow deer in the Upper Galilee, the Jerusalem Mountains and the Carmel and the roe deer on Mount Horshan. The reintroduction of these two species in Israel is one of the country's greatest conservation achievements.

The connection of the Cretan goat and the Armenian wild sheep to Israel's natural world is less clear. They probably never lived in the wild in this country, and so the Israel Nature and Parks Authority does not intend to release these species to the wild.



Persian fallow deer



Roe deer

## Raptors in the Hai-Bar

Many species of raptors living in Israel have come to great harm since Israel's establishment, mainly due to hunting and poisoning, habitat loss, electrocution and humans disrupting nesting.

Hai-Bar Carmel is home to the main raptor breeding nucleus in Israel. The work is part of a joint project by the Israel Nature and Parks Authority, the Israel Electric Corporation and the Society for the Protection of Nature in Israel. Its goal is to prevent the extinction of vultures and other raptors and strengthen their populations. Field and laboratory research are part of the project, as are efforts to preserve important habitats. Raptors are also being protected by insulation of high-tension wires to prevent electrocution, among other measures.

The project has already chalked up some important achievements. Vultures are nesting on Mount Carmel and a pair of white-tailed sea eagles born at Hai-Bar Carmel is nesting in the Hula Valley.

## Good to Know before Your Visit

1. The mammal pens and the bird enclosures at the Hai-Bar are first and foremost intended to foster reproduction and acclimatization.
2. The mammals are very sensitive to human activity. Loud noises can cause them to attempt to flee. If they do, they might collide with fences, leading to serious injuries or even death.
3. The trail at the Hai-Bar is a loop trail about 1.5 km long. The trails are paved and suitable for strollers.



## Visitor Trail

### Visitor Center

This is the place to get organized for your visit, to hear explanations from the rangers and watch a short film about the animals at the Hai-Bar and the phases of returning them to the wild.

### Upper Lookout Terrace

The terrace overlooks the Hai-Bar and the western part of Mount Carmel. Wooded Wadi Kelah can clearly be seen from here, making its way to Wadi Galim that descends to the town of Tirat Carmel. The University of Haifa and the Haifa neighborhood of Denya can also be seen from here, as well as Kibbutz Beit Oren. The green slopes you see here largely burned down in two major fires, in 1989 and 2010. In the first fire, both the animals and their enclosures were damaged. In the

second fire (known as the Carmel catastrophe) 44 people were killed and more than 2,500 hectares of forests went up in flames. The fire was finally brought under control right at the fence of the Hai-Bar, and the animals were not harmed.

## The Salamander Pool

Israel once had hundreds of winter rain pools where amphibians reproduced, including spadefoot toads salamanders and newts, and the croaking of male toads was an inseparable part of the Israeli night. But, almost all the rain pools have disappeared over the years due to drainage, agriculture and development. This has severely harmed the amphibian population, because they need water to reproduce and develop.



Salamander

The pool at Hai-Bar Carmel was built as a reproduction site for salamanders and other amphibian species. The pool is fed by surface runoff only, filling with nature's gift of rainwater. On one side it is built on a slope so the salamanders can get in and out easily. On the other, steps were built out of local stone so that hopping amphibians like frogs and toads will be able to enter and exit.

## Lookouts

The trail goes by lookout terraces with views of the mammal enclosures.

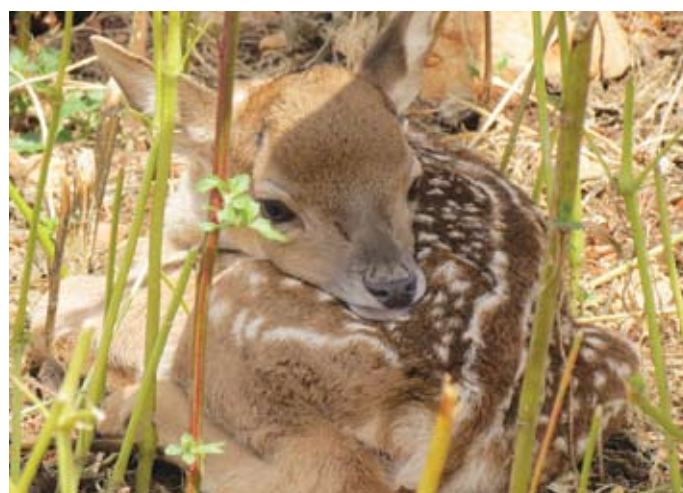
**Palestine mountain gazelle:** The gazelle is one of the symbols of the Land of Israel. It is believed that in the 1880s there were more than 10,000 gazelles in this country, but uncontrolled hunting and growing numbers of predators (especially jackals and wolves) decimated them and brought them to the verge of extinction. Thanks to enforcement of the law protecting wild animals, the gazelles have been saved from extinction, but their population is still small.



Persian fallow deer

**Persian fallow deer:** Persian fallow deer inhabited this country until about 200 years ago. Remains of deer bones and antlers have been found in archaeological excavations going back to prehistoric times. The Bible says that King Solomon had venison on his table (1 Kings 5:3). In 1888, the naturalist and clergyman Henry Baker Tristram saw fallow deer in the Lower Galilee, and in 1925 Persian fallow deer antlers were seen on sale in Jerusalem's markets, as were branching roe deer antlers. The antlers shed and grow back every year.

Persian fallow deer are now globally extinct in the wild and today can be found only in zoos and at Hai-Bar Carmel, and in Israel they have been reintroduced to the wild. The first fallow deer were brought to



Young Persian fallow deer

Israel in a special operation during the Islamic revolution in Iran (1978) on the last El Al plane to leave Iran. Four females from Iran and a male from Germany were brought to Hai-Bar Carmel. Since then, hundreds of their descendants have been born. When a large enough breeding nucleus was created, fallow deer were released to the wild, first in the Kziv Stream (1996) and then in the Sorek Stream and elsewhere. Persian fallow deer are very important in the Mediterranean ecosystem; as herbivores they can help reduce the spread of forest fires by grazing on the undergrowth.

**Roe deer:** The roe deer became extinct in this country in 1912. This is a small deer, which lives in the woods on its own, not in herds. The breeding nucleus at the Hai-Bar was created from individuals brought from Hungary. It grew rapidly, in no small measure due to its high natural rate of reproduction – females can produce twins and sometimes triplets. Roe deer are particularly shy, and so the lookouts on their enclosures are built as blinds so visitors can see the animals but the animals can't see them.

The Israel Nature and Parks Authority has so far released roe deer at Ramat HaNadiv in the southern Carmel and on Mount Horshan, east of Zichron Ya'akov.

**Cretan goat:** The Cretan goat resembles the ibex that lives in the Judean Desert and the Negev. It was domesticated in antiquity and intentionally brought to Crete and other Greek islands. Animals that escaped from domesticated settings eventually returned to the wild.

Cretan goats are active mainly at night. They can live in Mediterranean woodlands without needing to drink water.

The Swedish naturalist Friedrich Hellquist, who visited this country in 1751, reported seeing Cretan goat-hunting near Nazareth, but this is the only such testimony. Israel Aharoni, known as the first Hebrew zoologist, said he saw Cretan goats in southern Syria.

**Armenian wild sheep:** The Armenian wild sheep apparently did not live in the wild in this country. Those at Hai-Bar Carmel were brought from the mountains of Iran and they are kept in the reserve to illustrate the domestication of animals. Because they graze on the underbrush, the Armenian wild sheep at the Hai-Bar are used for forest-fire prevention management.

## Raptor Enclosures

Breeding nuclei of raptors are kept in enclosures at the Hai-Bar, including the biblical (Griffon) vulture, the white-tailed sea eagle (*Haliaeetus albicilla*), the golden eagle (*Aquila chrysaetos*), Bonelli's eagle (*Aquila fasciata*), the Lanner falcon (*Falco biarmicus*), Egyptian vulture (*Neophron percnopterus*) and cinereous vulture (*Aegypius monachus*). All of these species except for the sea eagle are globally engendered to some extent.

The raptor enclosures are intended first and foremost for breeding and not for display. Thus, species that are sensitive to human proximity are not shown to the public, and are monitored by cameras at the Hai-Bar. Generations of vultures, sea eagles, Bonelli's eagles and Lanner falcons that have hatched at the Hai-Bar are now at home in the wild on the Carmel and elsewhere in the country.

This is an achievement of global significance of which Israel is justifiably proud.

Raptors that hatch at Hai-Bar Carmel are fed and trained to be released to the wild. In a cooperative project with farmers, boxes for nocturnal raptors have been placed in fields. The birds feed on rodents that damage crops, thus reducing the need for pesticides.

Two types of large and impressive raptors – Griffon vultures and sea eagles – are on display at the Hai-Bar in all their glory. The Griffon vultures share their enclosure with Egyptian vultures.

**The sea eagle enclosure:** This bird's name reveals its favorite habitat – on the banks of bodies of water. The white tail of this large bird is one of its most prominent identifying features. Sea eagles live in pairs; the female is larger than the male. They feed on fish and aquatic



Egyptian vulture

birds, turtles and small mammals. In the Hula Valley, they also hunt cormorants. A pair of sea eagles raises one to three chicks a year.

Israel is the southernmost point of global distribution of nesting white-tailed sea eagles. In the 1950s, there were two pairs of sea eagles in the Hula Valley but none were seen in Israel after the draining of the Hula Swamp (1957) and poisonings in the Bet Shean Valley.

Israel is participating in an international project to reintroduce sea eagles to the wild. The Israel Nature and Parks Authority received sea eagle chicks from abroad to assist in establishing a stable population in Israel. These efforts have been successful, and at the time of this writing (2017), nesting sea eagles have been documented in the Hula Valley.

**The Griffon vulture enclosure:** The famous verse, "I bore you on eagles' wings" (Exod. 19:4) is actually a reference to the Griffon vulture. In the early 1940s there were 65 pairs of Griffon vultures living on the Carmel, but over the years they all became extinct. These birds feed only on carcasses and they are therefore particularly sensitive to poisoning. Cattle growers frequently throw poisoned carcasses into fields to kill the animals that prey on their herds. These poisonings are illegal and have very serious consequences for the entire food chain. Vultures are flocking birds; dozens can sometimes be seen surrounding a single carcass, and so the potential damage to many individuals is high if the carcass is poisoned.

Griffon vultures live in pairs; if one dies, the other cannot raise a chick on its own, sealing that offspring's fate. Because this species



Griffon vultures

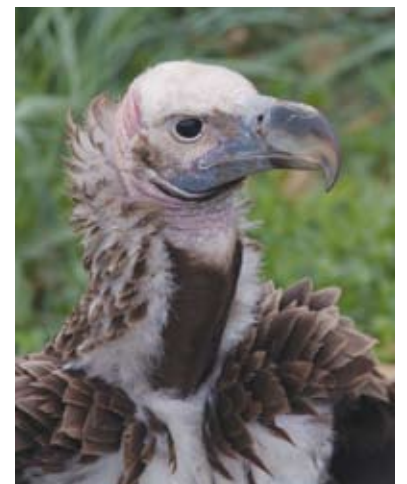
raises only one chick a year, strengthening the population of Griffon vultures is a long process that requires many resources. The breeding enclosure at Hai-Bar Carmel produces a few chicks every year and they are released to the wild, increasing the number of Griffon vultures in Israel.

**The feeding station:** Visitors to Hai-Bar Carmel can sometimes see many vultures gathered on the roof of the vulture enclosure. Most of them were probably born at the Hai-Bar, or are their descendants and they became acclimated on the mountain. They come to the vulture enclosure not necessarily because they miss it, but mainly because of the feeding station in the valley across from it.

These scavengers once fed on wild animals and farm animals. And so the Israel Nature and Parks Authority cooperates with cattle ranchers who give animal carcasses to the feeding station and thus help the vulture community to flourish on Mount Carmel.



A vulture chick, just after it hatched with the assistance of a keeper



Lappet-faced vulture



Reintroduction to the wild – a female Persian fallow deer (wearing a radio collar for monitoring)