



PARCO NAZIONALE
DEL GRAN SASSO E MONTI DELLA LAGA

Honey Book

Gran Sasso e Monti della Laga National Park



EXPO
E TERRITORI

National Park, honey and bees...

Why does our National Park take care of honey and bees?

Honey is the expression of the territory, of plant biodiversity in the Park and that's the reason why the Managing Body of our protected area has to preserve it. Bees are important for their pollinating function, that is as unconscious and unintentional for them as valuable to humans. In fact bees, flying from flower to flower to collect nectar and change it into honey, also carry and place pollen from one flower on another, thus allowing the cross fertilization of most plant species which, otherwise, could not reproduce!

The result of that is "environmental wealth" that is to say diversity and complexity of mountain ecosystems. A present from indefatigable bees, our busy allied... Pollen is not a component of honey but it inevitably ends in to it, so analysing this pollen, we can go back to the production area unmistakably. The bees are formidable environmental quality indicators, they explore the territory looking for abundant blooms and traverse hundreds of kilometres per year. Flying across area, they provide information on the health of the planet. And when they die, it is not a good sign! In the Park, honey production is ancient and closely linked to rural activities of these places. In the past time, honey was an important integration of food sources, a cheap sweetener and an essential ingredient for all traditional sweets and festivities. Today, there are many beekeepers that, beginning by simple passion and a few hives, then start a real business.

Honey

Honey is a valuable food supply for bees in winter. In spring and summer in fact, bees feed on the nectar of flowers (sugar source) and pollen (protein source). In their hive, bees, thanks to the help of the whole swarm, store these stocks diligently, at first filling the honey cells of then hermetically sealing them with a wax cap. Ultimately, honey production is the method of preserving a product for when this will be no longer available. We could compare honey to fruit jams that we prepare in the summer: an easy way to store the nectar that otherwise, wouldn't be available in winter.

The European Directive

"... honey is the food product that domestic bees produce from nectar of flowers or from sugary secretions by the living parts of plants or that are on the same, which they forage, transform, combine with specific substances of their own, store and leave in honeycombs to ripen".

(EEC Directive 22 July 1974)



Liquid or solid ... to each one his own!

Honey consists essentially of simple sugars, glucose and fructose, which is a readily available source of energy for our body. Not surprisingly athletes use it to regain strength after a physical effort. Any type of freshly harvested honey is liquid than with time, more or less, it solidifies. Generally, honey that has a higher content of glucose, crystallizes faster than the one with a higher fructose content. That's the reason why, sometimes, *Acacia* or *Chestnut* honey can still be liquid, one year after its harvest, just because they have a higher fructose content.

Pollen

Pollen is formed by a myriad of microscopic particles that are contained in the anthers of flowers and form the male germline. So it has a reproductive function, but it is produced in amounts exceeding of fertilization needs. Bees collect pollen from the flowers forming small balls deposited in pollen baskets of hind legs and carry it into the hive.

It has various colors depending on the flower from which it is taken.

Beekeepers gather pollen by placing a special grid at the entrance of the hive: as they pass, bees lose part of the load on that device. Pollen is especially rich in nutrients, "It's a pure energy", packed into a tiny volume; it mainly contains proteins and small



quantities of unknown but really substances used by bees to feed young larvae. Pollen can be considered as a restorative to the body.

Is honey a product of animal or vegetable origin?

Honey has indeed this twofold feature: the raw material has vegetable origin (nectar of flowers) but bees enrich it with enzymes that change the physical state and store it as honey. Therefore, it is also an animal product..

From bees to Cooking

Honey is "donated" directly from bees with no need of substantial transformation by men. In fact, honey is a stash of food for bees, and in the summer, they store enough for their livelihood and for us too!

The beekeeper has simply to... put it in the jar!



Monofloral honeys

Bees collect nectar following the succession of blooms of various flower species, although they are many kilometres distant from their hive. Many beekeepers, who call themselves "nomads" since they move the hives from site to site, try to synchronize the activity of collecting pollen by bees with several alternating blooms during the spring-summer time. When we speak of chestnut honey, for example, we think, that bees have visited mainly chestnut flowers to produce it. This is possible when the beekeeper places the beehives in proximity to these woods in the flowering period, letting the bees visit those flowers.

Before moving the apiary again, the early honey supers will ensure this particular production.

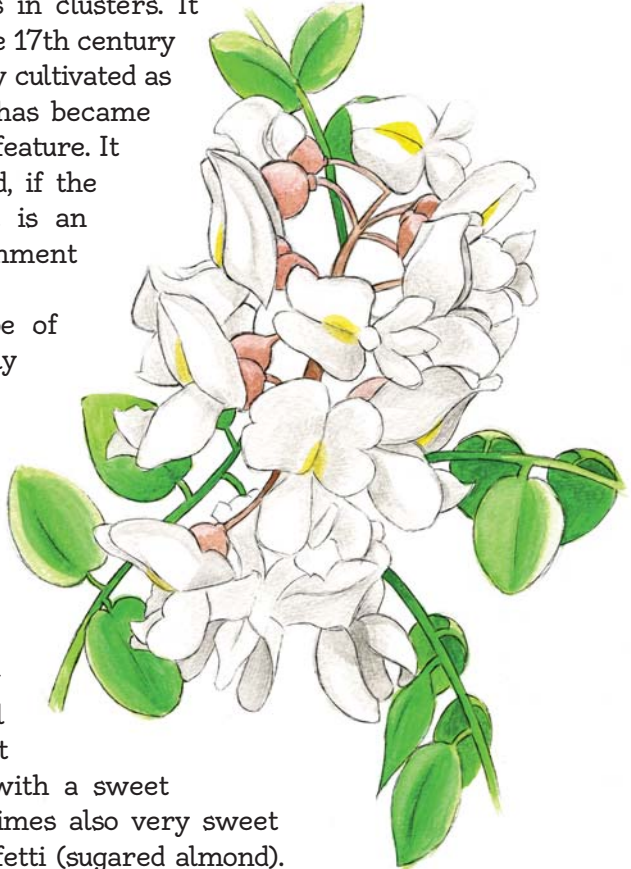
After that, laboratory tests can detect the presence of pollen in honey, certifying the sensory characteristics of conformity to a particular type of monofloral honey. Therefore monofloral honey production requires the beekeepers a greater commitment, especially as to greater sensitivity to the rhythms of nature, in addition to the work required for the continuous movement of bees from one site to another.



Acacia

Robinia pseudoacacia L. is a species growing low and with deciduous leaves and spines and white flowers in clusters. It was introduced in Europe in the 17th century from North America, originally cultivated as an ornamental plant, now it has become spontaneous with real infesting feature. It blooms in April and May. And, if the weather is not too fickle, it is an abundant source of nourishment after the long winter.

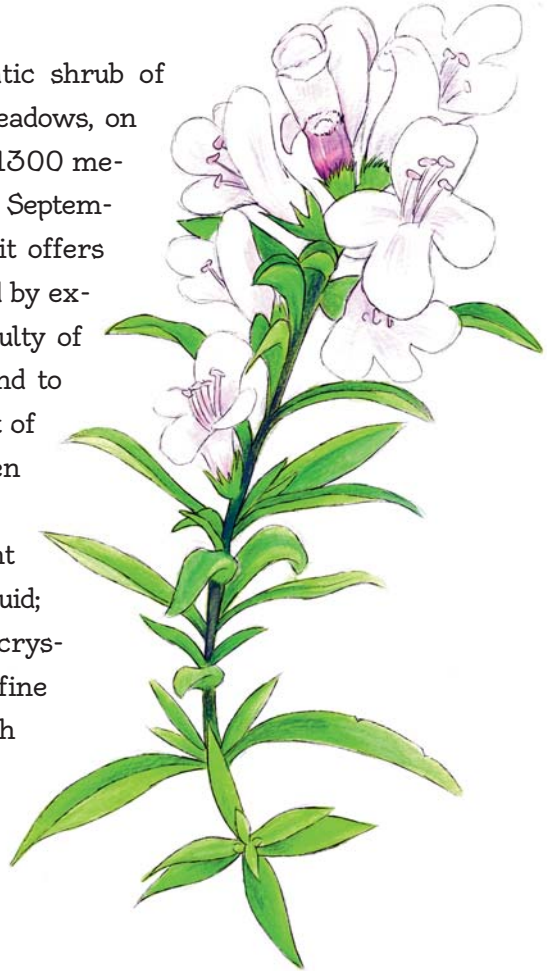
Good productions of this type of honey can be obtained in hilly areas of the Park, where blooms are plentiful. It is one of the most known and appreciated monofloral honey since its sensory characteristics are desirable for consumers because it remains liquid and it hardly crystallizes completely. The color varies from nearly colourless to pale yellow, smell and flavor are pretty weak, not particularly strong, delicate with a sweet and slightly sour, taste sometimes also very sweet which can remember the confetti (sugared almond).



Savory honey

Satureja montana L. is an aromatic shrub of Labiatae family growing on dry meadows, on calcareous soils up to an altitude of 1300 metres. Its flowering lasts from July to September, late summer, and in Abruzzo it offers a type of honey that is highly valued by experts. Its rarity is due to the difficulty of being collected in the mountains and to the bad weather affecting the flight of bees. Indeed, frosts and snow often make them it stop their activity.

The color of honey ranges from light amber to yellow green when it is liquid; when it solidifies it's green grey. It crystallizes rather quickly, forming fine crystals that give the honey smooth texture. The smell, as well as the flavor is of medium intensity, it evokes the smell of wet earth; it's slightly bitterish flavor can invoke that of coffee.



Sainfoin honey

The sainfoin (*Onobrychis vicifolia* Scop.) belongs to the Leguminosae, it grows up to 2200 meters above sea level, especially in the Central-Northern Apennines. In Italy, this forage area is known as "crocetta", mainly linked to sheep farming since it's used as fodder, especially in mountainous areas. Before it can be considered as a settled down species of high-altitude pastures, recalling a past not far away which made Abruzzo mountains rich and flourishing. Flowering is from May to August. The production of sainfoin honey is quite rare but it's remarkable especially in the mountain areas of the Park, since it is very appreciated for its typical floral characteristics. Honey is amber yellow, almost white. It tends to form little crystals slowly, thus getting solid. Both smell and flavour are delicate with floreal features. Its smell can evoke date, almond nougat or fresh nuts.



Dandelion honey

The flower of *Taraxacum officinale* W., belongs to the family of Asteraceae, also known as "shower head". It's a herbaceous perennial plant, common in grasslands of the plains and mountains in North Italy but quite present in mountainous Abruzzo. Producing this type of honey is difficult because of early blooming. In fact, at the end of winter bees may not have strength enough to ensure sufficient production of honey.

So, often the loot of the dandelion mixes with subsequent blossoms. Honey crystallizes quickly, forming a soft, creamy mass. When it's still liquid, honey is amber with yellow highlights; it's most easily recognizable when it crystallizes because it becomes cream yellow. The smell is very particular, and those who are lucky enough to choose it, are surprised to notice that it evokes chamomile infusion or essential oil candy.



Honeydew or Metcalfa honeydew

Honeydew is not honey because bees produce it from sugary excretion of certain insects. The *Metcalfa pruinosa*, native to North America, has colonized the entire Italian territory, parasiting several botanical species.

It feeds on the plant sap, absorbing protein portion and expelling the sugary part which is collected by bees. The production of honeydew goes on from late July until early September. Therefore honeydew is produced in the same way as bees form honey, However raw material is different. Honeydew remains liquid for a long time but can also crystallize; It is dark amber, viscous and has characteristic fruity smell of medium intensity; the flavor, ranging from little to normally sweet, is similar to the dried fruit or fig jam.



Chestnut honey

Castanea sativa Miller is a tree belonging to the Fagaceae family with oblong-lanceolate and deciduous leaves and yellow-green flowers.

These trees are common on acidic soils up to 1200 meters above sea level. Flowering is from June to July.

In our area, the chestnut woods grow on Laga Mountains thus allowing the production of very good honey in the province of Teramo, Ascoli Piceno and Rieti.

Chestnut honey is one of the main monofloral productions in Italy.

It is liquid and crystallizes very slowly and not always smooth.

The color changes from a more or less dark amber, the pungent and characteristic smell can evoke boiled chickpeas. The taste is slightly sweet, bitter, tannic, astringent and persistent.



Polyfloral honey

This is certainly the best known and most produced type of honey in our Park. In fact, the Gran Sasso and the Laga Mountains are geographically placed in Central Apennines, an area which is known for its remarkable floristic richness that distinguishes and places it among the areas with the highest number of plant species in the world.

It is estimated that there are about 24,000 vascular plants. This large number of different flowers, often rare and endemic, allows bees to produce excellent polyfloral honeys that, depending on the specific altitude, can be very different in color, smell, taste and flavor. Whenever we taste honey coming from the mountains of the Park, we are tasting a piece of floral biodiversity that makes our walks in these places during the summer more pleasant.



Other hive products

Propolis

Propolis is produced by bees from resinous secretions present on the gems of specific trees (poplar, oak, alder, fir, elm, chestnut, pine, Birch), by adding their salivary secretions and enzymes. Because of its antibacterial action, propolis is used by bees as lining for the inner walls of the hive. Its composition is very complex; among its many components, there are substances classified as flavonoids. Propolis has antimicrobial, antifungal, anti-inflammatory, disinfectant and many others features: a real stimulant for immunological capacity of the organism.

Royal jelly

Royal jelly is secreted by special glands of young nurse bees and is the nourishment of all larvae during the first three days of life. Yellowish white, creamy texture but fairly smooth, with a characteristic sour taste, it is the only food of the queen bee throughout its existence.

Royal jelly is considered one of the most complete natural foods, rich in proteins, lipids, sugars, trace elements, vitamins of the B group and many other important components. Collecting it requires special skill and care by the beekeeper and, for this reason, it is not at all easy to find on the market.

Taste with...

Experience is the best way to find the perfect match to your taste. We suggest some experiments, the choice is yours!

- Honey, cheese and other dairy products are always a safe and successful combination!
- *Acacia* or *Savory* are delicate honeys which do not affect but enrich the pairing.
- *Chestnut* honey, stronger and bitter, is excellent to be paired with soft cheeses and little ripe cheeses.
- *Sainfoin* honey, among the mildest honeys, floral and fruity honeys, can be chosen for cheeses such as pecorino cheese from Abruzzo.
- Polyfloral honey is a classic ingredient for sweets, especially those ones of the Christmas tradition, which makes a large use together with dried fruit.
- The "caramelized" aroma honeydew is a great dessert at the end of a meal with ricotta cheese and dried fruit.

A restorative remedy for "change of season" and the loss of physical energy is to stir pollen into good *Acacia* honey.... love at first taste!



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