CENTRO STUDI ETOLOGICI
C. S. E.

# corbaíola notiziario

Year 5 - Issue n. 7 - September 2007

## A collection of information and curiosities on the most varied nature subjects

The "perché,perché, perché" (why, why, why) section is eager to answer your most unusual questions. Read on to find out more about fruit flies Drosophilae and why the sky is blue?
In this issue "The woodsman" will talk to us about the Chestnut woods. True Dragons in our "Incredible!" section.
Remember to address all your questions to:

The Editor, Corbaiola News,
Centro Studi Etologici, Convento dell'Osservanza 53030 Radicondoli (Si)
or email us at
notiziario@centrostudietologici.org
Don't forget to write your name, age and where you are writing from.

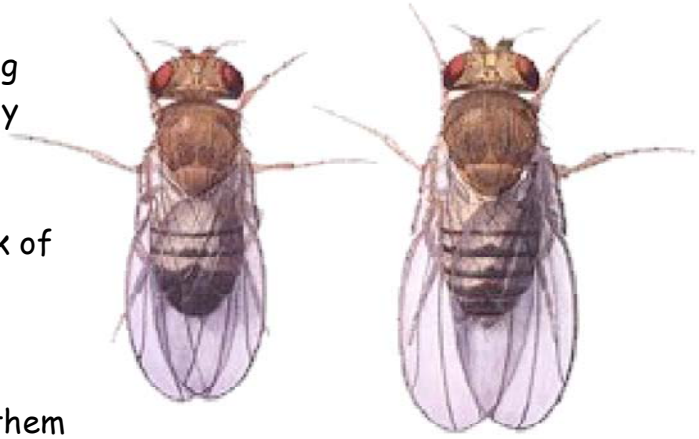
A warm greeting from all the Editorial Board.

Photograph of a Hummingbird Hawk-moth (*Macroglossum stellatarum*)

# perché, perché, perché?

## readers ask the questions

Where do the tiny insects that fly around over ripe fruit come from?
**Hazel** (Radicondoli)



How many times have you seen hundreds of tiny insects hovering around the fruit bowl or suddenly appear if you forget to put an open lemon in the fridge?
Those of you who have the knack of the "researcher" will have noticed that, strange as it may seem, these tiny insects have red eyes and that only some of them have a black spot at the back; only the most attentive observer will therefore be able to distinguish the female from the male, the latter has a black spot on its back. It is time for us to give a name to these tiny insects; they are commonly called fruit flies or vinegar flies whereas the scientific name is *Drosophila melanogaster* or just simply drosophilae. Looking into its habits, you may well say that the drosophilae are "drunkards": whenever grapes are being pressed to make wine, clouds of these tiny flies appear and you have to be very careful not to open your mouth otherwise you would probably swallow a mouthful!. Where do they come from? During the autumn months the female flies lay thousands of whitish eggs near the surface of fermenting food material. These eggs lay on the ground all winter a part of the spring months and hatch into larvae that feed on the fermenting food. The larva transforms into the pupa, where the metamorphosis takes place, in 8 to 10 days, depending on the temperature, the flies, attracted to light,

emerge from the pupa and start flying around looking for over ripe fruit, not disdaining that fruit left over on the kitchen table.
Speaking of drosophilae one important aspect must not be forgotten, these flies have been bred for over a hundred years; male and female flies with different characteristics, i .e. white eyes, black bodies, short wings, are kept in laboratories in breeding pots containing maize so as to study the Mendel's hereditary laws, that is to say the laws which are considered the base of genetic transmission from parents to children. The drosophilae are also considered important in the research of molecular biology.

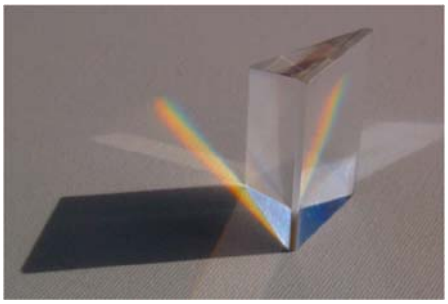
Hazel's question has been answered by Antonio De Marco, researcher at CNR of Rome;
images taken from http://www.en.wikipedia.org - http://www.flickr.com -
http://commonweb.unifr.ch

# perché, perché, perché? *our readers' question continued*

## Why is the blue sky

**Alessio** (anni 8 Firenze)

### The prism and the rainbow (see issue n.2 - 2003)



A small piece of glass of irregular shape which transforms a beam of white light into a beautiful rainbow is called a prism.The sun light is white, but it contains all the colors of the rainbow - red, orange, yellow, green, blue, indigo and violet - which are split by the prism to produce the rainbow. If you paint a top with these colors and spin it very fast, the rainbow colors meld so you see a white top spinning (see instructions to bild a top on Corbaiola, issue n.2 - 2003). As they go into the prism all seven colors of the sun beam follow the same path so the light looks white. However when they come out of the prism, each color proceeds on a separate path, and we see the colors of the rainbow as a result of this diffusion. The prism changes because it's made of glass. Imagine building a prism that is able to diffuse only one color, let us say blue, while leaving the remaining colors mixed together. What kind of material should we use to build such a prism? The answer is quite simple: air particles. However, it took ten centuries to find this simple answer: it took almost one thousand years to understand that the air molecules behave like small prisms, sending the blue beams in one direction and scattering the other colors in different directions. There are many of these molecules flying in all directions in the atmosphere. The blue beams are scattered all around so we see that the color of the sky as blue. We want to tell the story of this discovery.

### Leonardo da Vinci and Isaac Newton

The sky is normally blue, but sometimes it is white and at sunrise or sunset it can be red-orange. Why are these colors different? Why the moon is redder when we see it it near the horizon? What is the color of the sky of Mars? These questions are easy to pose, but the answers have only been found after centuries of speculation and Albert Einstein's brilliant insight.
Leonardo da Vinci, an astute observer of the world, noticed that the further away things are, the bluer they look, and

he used this observation to develop perspective in his paintings. He wrotein his notebook:
"There is another kind of perspective which I call Aerial Perspective, because through the atmosphere we are able to distinguish the various distances of different buildings, which seem to be placed on a single line. For instance, you see several buildings beyond a wall, all of which appear to be above the top of the wall and of the same size, but you wish in your painting to show the houses at different distances form each other and to give the effect of a somewhat dense atmosphere. You know that in an atmosphere of equal density the remotest objects such as mountains, because of of the great quantity of atmosphere between your eye and them appear blue and almost of the same hue as the atmosphere itself when the sun is in the East. Hence you must paint the nearest building above the wall its real color, but make the more distant ones less defined and bluer. Those you wish to appear farthest away you must make proportionately bluer; thus, if one is to be five times more distant, make it five times bluer. Following this rule, from the buildings which above a [given] line appear to be the same size those that are more remote and those that are larger than others will be easily distinguished."

In short, Leonardo argued that when we want to represent a house a little further away ,we have to color it a little bluer, and if we want to make it five times further away, we need to paint it five time bluer. Looking at "Mona Lisa" we notice that the distant landscape behind the girl is bluer than the closer one, and the contours of the far landscape are not very sharp.

But Leonardo also wanted to understand why the air is blue. As water was the most common bluish natural thing he knew, he incorrectly thought that air was blue because it carried small drops of water. It is easy now to understand that water droplets do not make the sky blue: in a foggy place, with the sky full of water droplets, we see the sky as more white than blue but the clouds, made of water, white rather than blue.

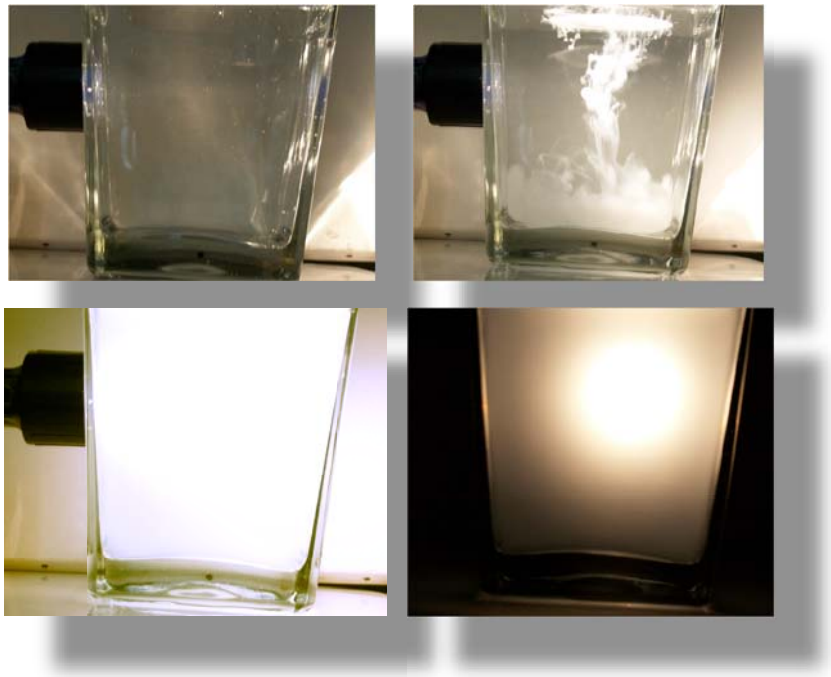
Isaac Newton figured out that the droplet theory did not work. When he studied the colors of soap bubbles, he noticed their predominant color was blue and thought the sky was full of very small water bubbles diffusing only

the color blue. The theory was not correct, but it contained a truth: the color of the sky depends on the size of the particles reflecting the light. Newton's idea was partially right: we now know that the air-prisms scatter a given color depending on their size.

When a scientific theory is proposed,we need to check its reliability by means of experiments: In the 19th century scientists started experimenting with air to check their ideas about the color of the sky. These experiments discovered several new phenomena. For example, light intensity decreasing with the increase of air thickness, and the measurement of the color and transparency of air .

During the following century a Scottish scientist discovered that light observed through the smoke of a locomotive looked reddish, so he started considering the possibility that the particles responsible for the blue of the sky had nothing to do with water. He also thought that the reddish color of the sun seen through the smoke was the same phenomenon as that of the reddish of sunset. Building on this theory, at the end of the century an experiment was made to see which color light assumes as it crosses a liquid or a gas.

## The milk and water experiment

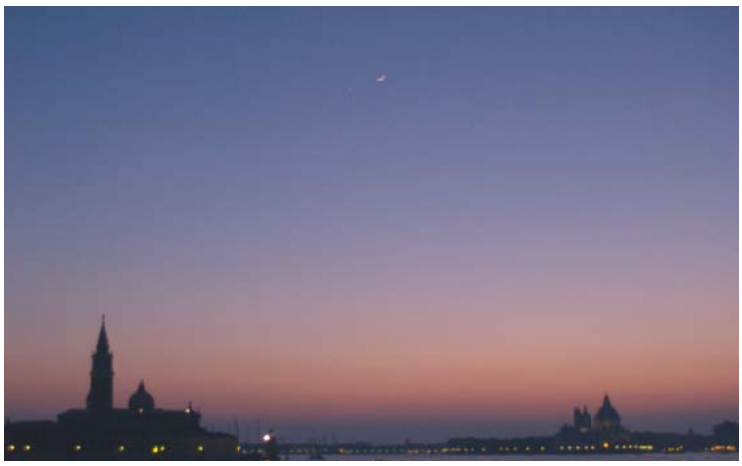


An experiment on the change in the color of light when it crosses a non-transparent fluid can be easily carried out at home.
We need only a small transparent glass of water, a flashlight, a dropper full of milk and a dark room. When we look at the color of the water perpendicular to the beam of light and put a few drops of milk in the water, we see that a slightly blue light diffused which becomes whiter as we add more milk. If we look from the front of the glass, we observe the light becoming redder as we add more milk to the water. The lateral observation corresponds to the blue sky phenomenon, whereas the frontal observation color is like the color of the sky at sunset.This experiment showed that neither water droplets nor Newton's bubbles were the cause of the color of the sky. However, at the beginning of the 20th century, not all the scientists were convinced that matter was made of atoms and molecules (our small prisms) and there were no experiments to detect molecules. Particles of dust or water droplets of fog can be easily seen, but where are air molecules? And, if they exist, how do they behave?

## The Colors of the Sky

The solution to this mystery started with the ideas of Rayleigh and Einstein; they accepted the concept of atoms and molecules. Rayleigh wrote a general formula showing that the color scattered by a molecule-sized prism depends on the size of the molecule.
According to this formula, air molecules (in particular nitrogen molecules) act as small prisms spreading blue light in all directions.
Some of the light from the sun is able to jump over the air molecules, but some of it (the blue rays) hits the molecules and spreads in all directions. When we look at the sunset,the density of the air is so thick that the blue beams are covered by the other beams and the resulting light is reddish-orange because it has lost the blue.

The Rayleigh theory was correct for a single molecule, but when applied to the whole sky it meant that the interference among blue rays would destroy them: the physicists were close to the solution put a further step was needed.
At that time Albert Einstein was studying why liquids became opaque when boiling. He observed that if we consider the sky as a set of small cubes of air, every cube does not contain exactly the same number of molecules as the others. Consequently if the beam of one cube destroys the beam of another cube, there are always a few beams which are not destroyed. Adding together the light of all the surviving beams the sky becomes blue. There have to be many beams for in



fact the air around is white, but the sky is blue.These small errors in the number of molecules are called "fluctuations", and they are really responsible for the color of the sky. Without these errors in the density of the atmosphere, our sky would be sadly black like the sky of the moon because the light can go only in one direction. Moreover the blue of the sky can only be seen because the empty space beyond the atmosphere is black. At sunrise or sunset the not-deviated light is not blue because this color has been "eaten" by air molecules.


Alessio's question has been answered by Roberto D'Autilia, phisicist - Dipartimento di Fisica Università degli Studi di Roma "La Sapienza". Photos by the author or copyright free
The author want to thank Christine Starnes who reviewed the english text

# The woodsman

## CHESNUT WOODS

Chestnut woods are usually identified by the presence of sweet chestnut trees. When entering this particular forest the first things one notices is the grandiosity of the plants once they have reached their full heights, the various gradations of light and the coolness of the surroundings'. For many years, these chestnut woods (sometimes denominated "selva") have been cultivated for their fruits and not for timber as for the rest of the woods. After a period of expansion in the cultivation of chestnuts in Italy, at the beginning of the century the national heritage of chestnut trees has undergone a considerable reduction due to an abandonment of the population from the countryside to the cities, to the amelioration of social and economical conditions and to the tedious and high cost of collecting the chestnuts. Another reason being the result of severe damage caused by two pathogenic fungi: cortical cancer and chestnut ink disease. The current situation of chestnut woods is tied to a more selective production of nuts and is no longer used to satisfy everyday necessities, but has become a luxurious delicacy. Many of the chestnut trees not cultivated for fruit have been transformed into timber woods and used for the production of wood for posts in other regions chestnut woods have been substituted by other kind of tree species. The cultivation of the chestnut represented the sole subsistence for a long period of time being complete substitution for cereals.

For years the chestnut has represented a significant part of the everyday diet, in fact such was its' importance that in some regions this tree was denominated "the bread tree" because the nuts collected could also be ground into flour for bread making.

Fossil evidence, along with palynology studies indicate that Italy is one of the regions where chestnut trees originated from. The exact ecological position in unknown due to the widespread cultivation of the chestnut, which in natural conditions would have been much rarer and located to smaller areas since its

# The woodsman (continued)

cultivation is not tied to the presence of other species if not itself.
The typical chestnut wood is made up of great trees which are usually sparsely grown (complete exposure to light of the crown favours an abundant fructification) operations connected with chestnut cultivation involve trimming the branches, clearing the ground underneath the trees and replacement of dead or less productive plants.

The chestnut tree is of notable longevity (400 - 500 years old), it grows from 15 to 20 metres, some trees can reach a height of 30-35 metres, the crown is wide and round-like, the vigorous roots do not grow far into the ground. Flowers appear in June; the florescence can be male or mixed. The latter contain male and female flowers. Once fecundated they produce a brownish to yellow prickly nutshell containing three kernels. The most famous chestnut tree in Italy is without doubt the "Chestnut of the 100 horses" on the side of Mount Etna, the crown of the trees apparently offered shelter to Giovanna d'Aragona and her 100 horsemen who were surprised by a storm on their way to Naples. This is actually a group of three plants grown so close together as to seem like one tree. In Tuscany we can come across famous chestnut trees such as the "Miraglia" of Metaleto, which grows in the vicinity of the monastery of Camaldoli, this tree is estimated to be over 600 years old.

The Woodsman is Alessandro Ceppatelli.
Photographs taken from www.comune.sant-alfio.ct-egov.it and
http://commons.wikimedia.org/wiki/Castanea_sativa

# Incredible! But could it be true?

## How did dragons spit fire, but most of all, when did they exist?

**Katya**, (Radicondoli)

fig. 1

We do not know when dragons have existed, and there is no evidence from palaeontology or zoology, showing that they ever existed; no fossils, skeletons, or other remains, like those found for the dinosaurs.

The first portrayals and descriptions of dragons, and events about dragons, come from very old times. Dragons appear in mythology and popular legends in a great variety of forms, and in various countries, often very distant geographically. It is as though a whole family of different dragon species existed once in different parts of the world, and became extinct mysteriously.

The discipline of studying dragons is called 'dracontology'. The word 'dracon' comes from Greek. It means snake. This word is often found in mythology and history. The Romans, for example, used to draw 'dracones' on their standarts, and the Vikings called their ships 'drakkar'.

fig. 2

The 'classic' dragons of the western mythology spit fire, were covered with scales, had four limbs, huge bat like wings, and an arrow-headed tail. They were carnivores and greedy after freshly milked milk, and often preyed upon cattle, although they did prefer children and young maidens, possibly of royal blood. But these are not the only dragons that have been described. The 'serpent dragons' were similar to snakes, yet enormous. They usually dwelled in the neighbourhood of rivers, lakes, and in the open seas. The serpent dragons were wingless and limbless, with dragonesque heads, crocodilian jaws, and

fig. 3

often horns. The Scandinavian 'lindorm' looked quite like a snake, but possessed one pair of forelimbs. The 'wyvern' had great affinities with the classic dragons, but only two limbs, and did not usually spit fire. The 'sky' dragons in the Chinese and Japanese mythology were benevolent creatures, masters of flight (although some of them had no wings!), and were able to take different forms, human among others.

fig. 4

Numerous historical sources and old manuscripts describe events including dragons. Not only legends passed on by mouth, but also texts, old chronicles, names of places, drawings and paintings. Historians, philosophers, and scholars bring us a great deal of testimonies and, besides dragonic tales, have described events known to have taken place. The accounts are so numerous and detailed to make reliable sources of some historical events seem weak in comparison. Known and well-respected scholars in the XVII century discussed dragons as other living creatures, describing their anatomy and natural history in painstaking detail. In the old bestiaries we find drawings and descriptions of the appearance, habits and behaviour of dragons. Edward Topsell's voluminous treatise on zoology, published in 1607, includes dragons, that Topsell considered being reptilians, closely related to serpents.

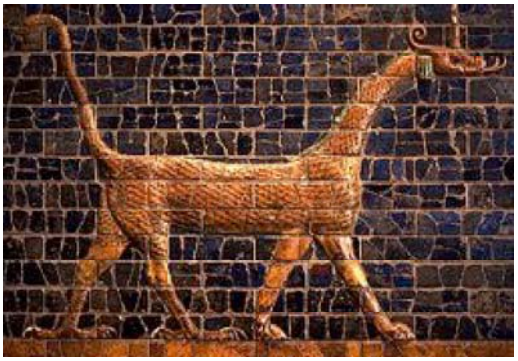


fig. 5

But if dragons are only imaginary creatures why do we find them in so many documents, drawings, and descriptions? Why do they appear in many cultures so different and distant, both geographically and historically? How is it possible that so many people who never got in contact with each other share memories and tales of dragons?

fig. 6

The bas-reliefs of the Ishtar Gate, a magnificent edifice of ancient Babylon dedicated to the sun god Marduk (and erected during the reign of King Nebuchadnezzar, about 600 B.C.) represent three animals: a bull, a lion and a dragon. The first two are fairly realistic representations of living animals, but

what about the dragon? Sirrush, or mushussu, the 'Babylons' dragon' is covered in fine scales, has a slender body, four legs, a long neck, a long tail, and a horn (or may be two) upon its head. Sirrush does not resemble any animal known to have existed at the time. But it has strong similarities with the sauropods, herbivore dinosaurs, such as Apatosaurus and Diplodocus, officially extinct 65 million years ago. How then did the Babylonians get the image of Sirrush?

During the last 200 years numerous reports have come of an elusive water creature inhabiting the huge and virtually inaccessible Likouala swamps, in the People Republic of the Congo. Local people call it the mokele-mbembe. According to descriptions by local and European observers, the mokele-mbembe resembles a small sauropod dinosaur. In the eighties, several expeditions have looked for evidence of its existence, but without success.

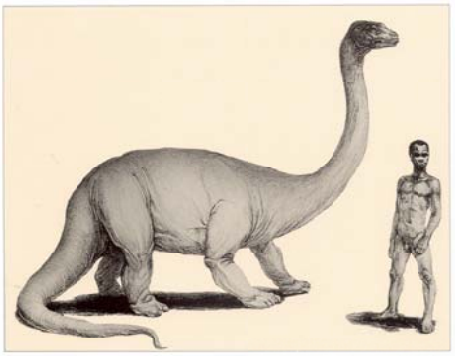


fig. 7

Getting back to the Babylonians, the biblical Apocrypha narrates of a dragon living in the temple of the goddess Bel, and which Daniel killed to show that it was mortal. Some have proposed that it could have been a living mokele-mbembe, captured by the Babylonians in Central Africa, during an expedition to obtain building materials for the Gate. Bricks identical to those used for the Ishtar Gate have been found in Central Africa, possibly supporting this fantastic hypothesis!

Observations and retrievals of animals and fossils have with no doubt contributed to create myths and legends; for example sightings of crocodiles, alligators, monitor lizards, and marine serpents. Early findings in Asia of giant sauropod dinosaurs have probably contributed to the longstanding beliefs and traditions of Chinese and Japanese dragons. The American scientist Carl Sagan proposes in his book 'The Dragons of Eden' (1977), that myths and legends on dragons may be the result of "memories' of dinosaurs passed down to us by the earliest mammals living in the shade of dinosaurs. The similarities between dragons and certain dinosaurs are certainly stunning. Is it just a coincidence, a fantastic elaboration of tales, which gave to living animals a pair of wings and the ability to spit fire, or may it be the remnants of an ancient memory?

There are real animals we call dragons. One of them is the Komodo Dragon (Varanus komodensis), a monitor lizard that inhabits the island of Komodo in

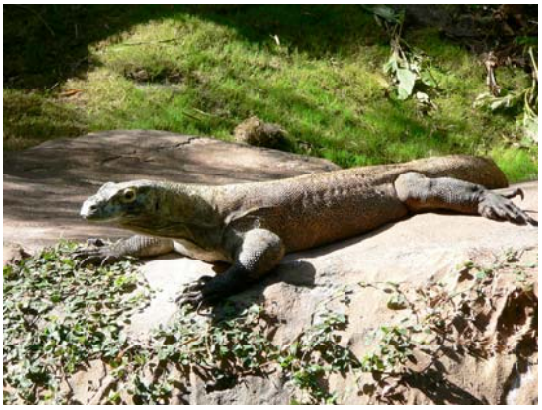


fig. 8

Indonesia, and grows to a length of three metres. The Komodo Dragon is a carnivore and a big predator, hunting invertebrates and vertebrates of various size. It attacks live pray as buffaloes and even man. It ambushes with a sudden charge, and bites its prey that dies of the resulting infection. The Komodo Dragon possesses virulent bacteria in their saliva, just like some of the dragons of our legends, that could spread pestilence and infections by their noxious breath, wiping out an entire population. Despite its huge dimensions, the Komodo Dragon remained unknown to the scientific world until 1912. Obviously the local populations were aware of its existence.

Sightings of aquatic monsters are still reported today in many areas, for example the Canadian Lake Okanagan, Lake Dakatua in New Guinea, Flathead Lake in the United States, the coasts of British Columbia, Massachusetts, and Scandinavia. There are similarities in the descriptions, which do not correspond to any species known to be living today. They do surprisingly resemble the Zeuglodont, an early whale, extinct 25 millions years ago. The Zeuglodont had small fins, a flexible neck, and could reach a length exceeding 20 metres. It was able to flex its vertebral spine vertically, looking very much like sea and lake monsters, and the legendary aquatic serpent dragons. Some believe that Zeuglodonts came ashore to mate and give birth. If this is true, they probably moved by crawling and humping their bodies vertically, like caterpillars. Could the sights of these animals have inspired the legends of the great serpent dragons? The oceans are vast and deep and spectacular species of marine animals are still being discovered today. Although there is no scientific evidence of its existence, how can we reject the possibility that a species similar to the Zeuglodont have survived?

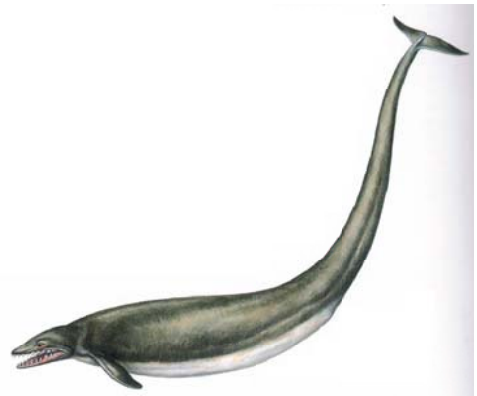


fig. 9

During the last centuries some people from Bayern, Austria, and the Swiss Alps, believe in the existence of a mysterious species hiding in the mountains. It is known as the 'tatzelworm'. Reports describe the tatzelworm as snakelike, with a length of about a meter, and two forelegs. The zoologists most open to the

possibility of finding some truth in these accounts, have proposed that it could be a large skink. Others have suggested a salamander. The myth of the Scandinavian 'lindorm' could be the result of sights of a species similar to the tatzelworm.

fig. 10

Regrettably neither the great explorations of the eighteenth century, nor more recent expeditions, have brought to light remains of dragons, or any proof of their existence. Dragons are destined to remain part of the world of myth and fantastic creatures, and the symbol of unexplored, perhaps dangerous, territory. The medieval tradition placed dragons and other mythological creatures in the empty spaces of maps, upon unexplored areas. The Latin expression 'hic sunt dracones', literally 'here are dragons', appears for the first time on the Lenox Globe, the second oldest known terrestrial globe (beginning of 1500), on the eastern coast of Asia. Dragons became a symbol of the unknown; as the British say, sometimes, before embarking in a new and risky enterprise of unsure outcome 'here there be dragons'!!!!

The western mythology and legends tell of dragons spitting fire. But how? Is it not absurd to imagine a creature producing fire and flames?

Nature is certainly not constrained by our lack of imagination. We just have to look around to see bizarre creatures that have the most extraordinary strategies, and weapons. Retractile tongues like spears, colours that change abruptly, lassos, disguise and mimicry, traps and ambushes, but creatures breathing fire?

The bombardier beetle (genus Brachynus; which occurs in Italy with various species, including Brachynus crepitans, exhalans, sclopeta, explodens; the names give a good idea of their specialty!) fires out liquid 'fuel' at a temperature of about 100 degrees centigrade. This is ignited inside a reaction chamber exploding with a bang, and scaring predators. The evaporated liquid, at the same time, has an irritating effect on the skin of the aggressor.

fig. 11

But let us get back to dragons. To produce fire, the dragons needed fuel (something that can burn, a gas for example), and something to light it with, an ignition system to start the combustion process (flame or sparks).

According to one of the theories, dragons were endowed with highly specialised organs: the flight bladders. These chambers were placed beside the lungs, and utilised to store gas produced by bacteria from the dragon's guts, during the process of digestion. The gasses included, among others, methane and hydrogen, the lightest gas on earth, with a density 14 times less than air. Once filled with hydrogen, the flight bladders helped to lift the dragon by lessening its weight (like a balloon) and made flight possible. Flight could otherwise not be explained, as dragons' wings where relatively small in relation with their weight. Flight requires obedience to the laws of physics: the wing-to-weight ratio, which is the relationship between weight, power and wingspan.

*BASILISCO* (*Basiliscus vittatus*)

E' comune nei luoghi di folta vegetazione in vicinanza dei fiumi nell'America tropicale. Nuota meravigliosamente. Gli indigeni del Messico lo chiamano « zumbichi ».

(*Fots. Berridge*).

fig. 12

These bladders were not only used for flight. They had another function: fuel storage. Hydrogen and methane served as carburant. To produce flame the dragon used small quantities of platinum found in rocks and soil, and previously stored in a little membranous sack situated under its jaw. Platinum is not only a precious metal, but also a catalyst. When it combines with oxygen, hydrogen and methane it produces fire!

To prevent the flames from burning its mouth, armoured plates resistant to heat covered the inner surface of the mouth of dragons. And to avoid burns from the returning flames, dragons had a flashy valve at the back of their throat. This flap was similar to the false palates found in crocodile throats: a membrane that closes while the crocodile keeps its prey under water. Crocs use it to stop their lungs from flooding while holding prey underwater. Otherwise they would drown while hunting!

According to the 'flight bladders model', every time the dragon spit fire, it diminished the hydrogen reserves it needed to keep airborne…. This suggests

that the dragons probably used fire sparingly, and only when strictly necessary. Tales tell that dragons spit flames that reached 1000 degrees centigrade!

Illustrations and captions:

Classic western dragon
fig. 1 - Raffaello Sanzio, St. George in battle with the dragon. National Gallery of Art Washington (D.C.)
fig. 2 - St. George and the dragon, Paolo Uccello, 1456. Musée Jacquemart André, Paris
fig. 3 - St. George in battle with the dragon, canvas by Vittore Carpaccio (1502-1507) School of "San Giorgio degli Schiavoni, Venice
Source: Wikimedia Commons (http://commons.wikimedia.org)

Snake dragon
fig. 4 - Leviathan, incision by Gustave Doré 1865. from Wikimedia Commons

Sirrush, the dragon from Babilonia
fig. 5 - bas-relief of the Ishtar gate. Source: Wikimedia Commons

Lindworm
fig. 6 - Siegfried kills Fafnir, Konrad Deilitz 1880. Source: Dragons, a Natural History, Karl Shuker, 2003

fig. 7 - Mokele mbembe. Source: Dragons, a Natural History, Karl Shuker, 2003

fig. 8 - Komodo dragon, *Varanus komodoensis*. Source: Wikimedia Commons

fig. 9 - Basilosaurus, "king lizard" a mammal that lived 40 to 37 million years ago. Source: Dragons, a Natural History, Karl Shuker, 2003

fig. 10 - Tatzwelwurm, illustration. Source: http://www.criptozoo.com

fig. 11 - *Brachinus sp.* Bombardier beetle. Source: Wikimedia Commons licensed by: http://creativecommons.org/licenses/by-sa/2.5/

fig. 12 - Basilisk
Source: Storia naturale - vita degli animali, delle piante e della terra. Vecchi 1926
The basilisk is a mythological creature found in bestiaries and western legends. It is also known as "the king of snakes" most probably because of the crown shaped crest on its head. Tales say that just one look of the creature could kill. Not only, its venomous gaze could dry up trees, shrubs and all the surrounding vegetation, its breath could infect the air and rot all the waters causing serious plagues. The basilisk was feared by everyone. As time went on the basilisk "evolves", its dimensions are greater and its lethal arms augment. In more recent stories the basilisk is capable of spitting fire and just the sound of its voice is lethal. Eliminating the animal was not impossible: it died instantly at the sound of a rooster and it own reflection also caused the creature to die.The photo shows an existing non-mythological basilisk, a meek inhabitant of central America slightly resembling a dragon.

For those of you who would like to learn more on dragons I advise:

Books:
Karl Shuker Dragons - A Natural History, Simon & Shuster 1995
Ernest Drake - Dragonology. Editor Dugald A. Steer, 2003
Ernest Drake - The Dragonology Handbook - a Practical Course in Dragons. Editor Dugald A. Steer, 2005

Films
Darlow Smithson, Animal Planet: Dragons - A Fantasy Made Real (dvd), 2005

Internet
Google is very useful for searching information, but be careful not everything you read is true, get help from an adult when consulting the web.
Wikipedia - http://wikipedia.org/
Info available in different languages.

Libraries
Here you have the advantage being helped by the staff.
Remember that by choosing different sources, the "point of view" of what you're looking for changes, i.e. you can choose to look at the scientific section, or legends and myths, you could find out the stories of Saints, fantastic, or epical literature or even cryptozoology.

Katya's question was answered by Ludovica Cervi,
Biologist and expert in environmental management and Agenda 21

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