

Compiled by Damayanthi Hewamanna

The beauty of *Heliconia*

Heliconia is a genus of about 100 to 200 species of flowering plants native to the tropical Americas and the Pacific Ocean islands west to Indonesia. Common names for the genus include lobster-claws, wild plantains or false bird-of-paradise.

The last term refers to their close similarity to the bird-of-paradise flowers (Strelitzia). Collectively, these plants are also simply referred to as *heliconias*. It is the sole genus of the family *Heliconiaceae*, but was formerly included in the family *Musaceae*.

The APG system of 1998, and its successor, the APG II system of 2003, confirms the *Heliconiaceae* as distinct and places them in the order Zingiberales, in the commelinid clade of monocots.

The leaves of these plants are 15-300 cm long, oblong, growing opposite one another on non-woody petioles often longer than the leaf, often forming large clumps with age. Their flowers are produced on long, erect or drooping panicles, and consist of brightly colored waxy bracts, with



Heliconia vellerigera

Kingdom	: Plantae
Division	: Magnoliophyta
(unranked)	: Monocots
(unranked)	: Commelinids
Order	: Zingiberales
Family	: Heliconiaceae
Genus	: <i>Heliconia</i>

small true flowers peeping out from the bracts. The growth habit of *heliconias* is similar to Cannas, Strelitzias, and bananas, to which they are related.

Heliconias are grown for the florist's trade and as landscape plants. The flower of *sittacorum* (Parrot *Heliconia*) is especially distinctive, its greenish-yellow flowers with black spots and red bracts reminding of the bright plumage of parrots.

Several cultivars and hybrids have been selected for garden planting, including:

H. psittacorum × *H. spathocircinata*, both species of South America, mainly Brazil

H. × rauliniana = *H. marginata* (Venezuela) × *H. bilhai* (Brazil)

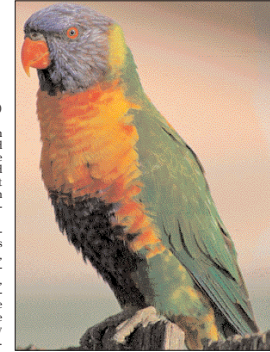
H. chartacea cv.

Heliconias are an important food source for forest humming birds, especially the hermits (*Phaethon* spp.), some of which - such as the Rufous-breasted Hermit (*Glaucidium nigrum*), also use the plant for nesting. The Honduran White Bat (*Ectophylla alba*) also lives in tents it makes from *heliconia* leaves.



Parrot *Heliconia*, *Heliconia psittacorum*

The world of Parrots



Rainbow Lorikeet

Parrots, also known as *psittacines* are

birds of the roughly 372 species in 86 genera that make up the order *Psittaciformes*, found in most warm and tropical regions. The order is subdivided in three families: the *Psittacidae* (true parrots), the *Cacatuidae* (cockatoos) and the *Nestoridae*.

Parrots have a pan-tropical distribution with several species inhabiting the temperate Southern Hemisphere as well. The greatest diversity of parrots is found in South America and Australasia.

Characteristic features of parrots include a strong curved bill, an upright stance, strong legs, and clawed zygodactyls feet. Most parrots are predominantly green, with other bright colors, and some species are multi-colored. Cockatoo species range from mostly white to mostly black, and have a mobile crest of feathers on the top of their heads. Most parrots are monomorphic or minimally sexually dimorphic. They are the most variably sized bird order in terms of length.

The most important components of most parrots' diets are seeds, nuts, fruit, buds and other plant material, and a few species also eat insects and small animals, and the lories and lorikeets are specialized to feed on nectar from flowers, and soft fruits.

Almost all parrots nest in tree holes (or nest boxes in captivity), and lay white eggs from which

emerge altricial (helpless) young.

Parrots, along with ravens, crows, jays and magpies, are some of the most intelligent birds and the ability of some parrot species to imitate human voices enhances their popularity as pets.

Trapping of wild parrots for the pet trade, as well as other hunting, habitat loss and competition from invasive species, have diminished wild populations, and parrots have been subjected to more exploitation than any other group of birds.

Recent conservation measures to conserve the habitats of some of the high-profile charismatic parrot species has also protected many of the less charismatic species living in the ecosystem.



Blue-and-yellow Macaw eating a walnut held by a foot

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Humans and parrots have a complicated relationship. Economically they can be beneficial to communities as sources of income from the pet trade and are highly marketable tourism draws and sym-

careers to parrots. Zoos and aquariums employ keepers to care for and shape the behavior of parrots. Some veterinarians who specialize in avian medicine will treat parrots exclusively.

Biologists study parrot populations in the wild and help to conserve wild populations. Aviculturalists breed and sell parrots for the pet trade.

As tens of millions parrots have been removed from the wild, and parrots have been traded in greater numbers and for far longer than any other group of wild animals. Many parrot species are still threatened by this trade as well as habitat loss, predation by introduced species, and hunting for food or feathers. Some parrot species are agricultural pests, eating fruits, grains, and other crops, but parrots can also benefit economies through bird watching based ecotourism.



Varied Lorikeet (*Psittoteles versicolor*)

Flying Sherlock Holmes

MADHUBHASHINI RATHNAYAKA

A buzz of a swarm of flies was heard from the gutter and the place was full of bad odour, so a walker just peeped where the flies were coming out. He was nearly fainting after seeing a decomposing human body lying in the deep gutter.

As so when ever a carcass of an animal or a corpse of a human lies (not in special conditions like in a mortuary) it becomes a magnet to the insects including flies, beetles and cockroaches.

Today such a small insect is not neglected, but has become 'Sherlock Holmes' uncovering murder cases. It is Forensic Entomology. This method uses maggots and other insect information to solve crimes, which dates back to the ancient Egypt century when the people noted that about three weeks after someone died, a swarm of flies would emerge from the corpse which they believed as some form of reincarnation and to China in the 13th century.

The documented Chinese forensic entomology by a Chinese lawyer and a death investigator in the 13th century in the medico-legal text book is this. There near a rice field, a stabbing had happened and a day after the incident the investigator ordered the workers



Maggots feeding on a body

This field, forensic entomology is becoming a developing brand of science in today's world. Through this, there are ways to find out time of death, measuring the maggot size, pulling fly eggs out of putrefying matter and identifying all the species of insect crawling on, under and in the corpse

to lay down their sickles. A blow of flies was drawn by a single sickle and the owner confessed he was the murderer.

When considering about the flies, the adults fly far and wide searching for a suitable corpse. An American research has revealed that, insects take 36-48 hours to reach a body if its inside is a well-maintained lodging for them. When they find one, they lay their

eggs. These eggs develop into larvae-white flabby eating machines that grow by eating the corpse. The larvae cannot move far and eventually change into winged adults via an intermediate stage called the pupa.

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ing the maggot size, pulling fly eggs out of putrefying matter and identifying all the species of insect crawling on, under and in the corpse.

These insects can prove much more than that which means after the corpse becomes a skeleton, residue in fly-pupae casings can indicate whether the corpse had high drug levels in his system or higher than expected levels of lead, barium or antimony, which would reveal a death by shooting.

From 1-3 days after the death, the internal organs are decomposed by bacteria and the enzymes from the digestive tract and dead body cells. But the body appears fresh. The primary strike flies arrive. Then 4-15 days after the death the body smells swells and becomes wet and sticky attracting secondary strike flies. They feed the small even away from about 1.5 km. In the 11-28 days the body turns into dried tendons and after 25-28 days the skeleton is left.

The flies that can be seen in this stage feed on dried skin, tendons and bone, and also some beetles devour maggot. In the early stages of decomposition, fly larvae are the most abandoned ones, and they can reveal a lot about the corpse. Before pupate, the maggot go through three stages, each lasts about 20 hours. So scientists study its two breathing holes (which have some changes according to the stages) to identify which stage the larva is.

The forensic entomologists go through a process like taking photos, sweeping net over the corpse to collect insects, checking the clothe for insects, taking the soil samples from about 10cm underneath the corpse, looking for pupae under objects that are 5-17 away from the body, collecting beetles and identifying previous weather at the scene which they continue for 5-7 days.

The scientists are still trying to access the hidden corners of this method by conducting researches. So do not belittle the flies that buzz in your home making you angry. It may be a witness of a murder.



A fly

Free sterilization and neutering

The Animal Welfare and Protection Association will conduct a free sterilizing and neutering clinic at No.146, Kalapura Road, Templars Road, Mount

Lavinia from 7.00am to 12 noon on a first come first serve basis.

Dogs and cats, four to six months and over can be sterilized and neutered.

They must NOT be given any meals or water 12 hours prior to the operation and must be not sick. Cats should be brought in a box or a cage and the dogs

with a muzzle and a chain. For more information you can call on 23081916 or 0776-566181 during office hours or 2324152 after 7.00pm.