

## *Butterfly farming in assam*

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Butterflies are the most spectacular insect group which add glory to the nature. They are regarded as the jewels of nature flying over the bushes everywhere in search of nectar. They have a good aesthetic, scientific and trade value, Many species entered into the trade due to their enchanting colouration and size, In different parts of the world specially UK, USA, Japan etc. the butterfly trade is going on and some trade agencies have been established to deal with live or dead specimens. From NE region, it is reported --)at a large number of species are being collected from forest areas and exported to other parts of the world,

Assam is endowed with magnificent assets of enormous wild plants and animals, The luxuriant growth of the plants due to conclusive climatic conditions supports wide varieties of animals. Butterflies are one of the insect group abundantly available in all types of habitats. It is common to have encountered with a number of these flying jewels wandering over the bushes, grasslands near the streams, gardens and in the forests.

According to *Fauna of British Indic* (1974) nearly 1430 species of butterflies have been identified in India among which more than 60% are present in NE India. There is no specific records of total number of species present in Assam. Perhaps no such work has been carried out till now to know the numbers. But according to our survey (unpublished) the total number will go upto 800 species excluding the sub-species and variations. All these species are distributed among 10 families like - i) Papilionidae, ii) Pieridae, iii) Danaidae, iv) Satyridae, v) Amathusidae, vi) Nymphalidae, vii) Lycanidae, viii) Hesperiidae, ix) Erycinidae, x) Acraeidae

Butterflies of Papilionidae family are known as "Swallotails" due to presence of tail like projection of the hindwings in some species, These are the large and very beautiful species most of which are living in natural forest area. They are flower lovers and prefer moist environment. The IUCN included these groups in the "species survival action plan" because of the alarming decrease of their population, habitat destruction and increase of population and declared as endangered fauna. They have selected some species and prepared a list of priority for conservation of these butterflies. In India they have given top priority to "Kaiser-I-Hind" a very spectacular Himalayan species available in Assam. Other important species are "Bhutan glory", "Apollos", "Dragon tails", "Common Birdwing", "Golden Birdwing", "Yellow Helen", "Red Helen", "Paris peacock", "Great Mormon", "Giant windmill", "Common Batwing", "Large windmill",

"Common Peacock", "Sword tail", "Common Raven", "Lemon Butterflies" etc. Among these the largest one is the "Common Birdwing" with a maximum wing span of 199 cm.

Pierids are predominantly white and yellow in colour with moderate sizes. The "Great Orange tip" is one of the large and brilliantly coloured species. "Common jejbel", "Psyche", "Cabbage white", "Gull", "Pioneer", "Common wanderer", "Emigrant", "Common Grassyellow" are some available species in Assam. These butterflies prefer plants of Crucifereae, Euphorbiaceae, Leguminosae, Loranthaceae families.

Danaids are popularly known as the "Tigers", "Crows" and "Nymphs". Some available Danaids are "Plain tiger", "Blue tiger", "Common crow", "Blue crow", "Striped crow", "Glassy tiger" etc. These butterflies are beautifully coloured with orange, yellow, black stripes, purple, metallic etc. These butterflies larvae mostly feed on the leaves of plant species belonging to Crucifereae, Euphorbiaceae, Asclepiadaceae, Rubiaceae etc.

The satyrids are mostly brown in colour and they prefer to stay in shady areas. These are dull in colour having large eyes with dry season and wet season form. The larvae mostly feed on grasses and bamboos. Butterflies of Amathusidae family are known as Queens, Kings, Fauns, Dulters etc. They prefer mainly the open space inside the jungle. These are the most beautiful butterfly in Indo-Malayan region.

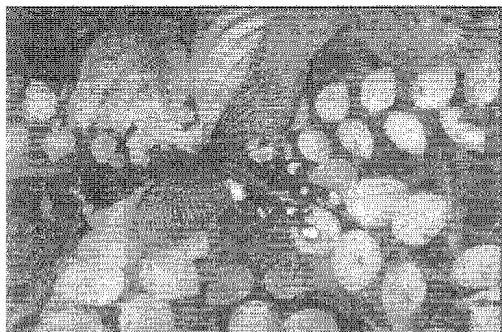
The large family of butterfly is

Nymphalidae. It contains large number of beautifully coloured butterflies and these are popularly known as Raja, Nawab, Baron, Duke, Dutches, Princess, Admiral, Commodore, Sergeant, Sailor, Map, Pancy, Leopard etc. These butterfly larvae prefer the plants of Acantheceae, Anacardiaceae, Convolvulaceae, Euphorbiaceae, Liliaceae, Mulvaceae, Rubiaceae etc.

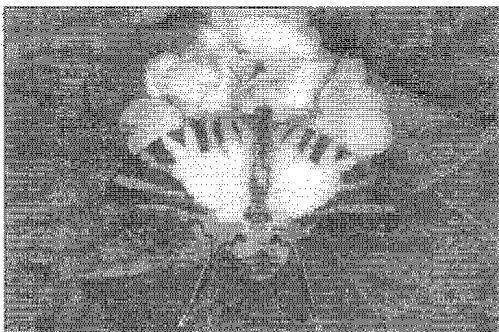
The blue and metallic coloured of moderate size butterflies are known as Lycanids. These are known as the "Puffs", "Tits", "Sunbeams", "Pierrot", "Blues", "Jewels", "Ceruban", "Silverstreak", "Silverline", "Flash" etc. They prefer the plants of "Amarantheceae", "Euphorbiaceae", "Leguminosae", "Maliaceae", "Myrtaceae", "Rosaceae", "Rutaceae" etc. families. The "skippers" are included in the Hesperiidae family. They are predominantly brown but orange, green and metallic green also available. They are very fast fliers and majority love flower, others prefer animal excreta.

Though these species of butterflies are available in Assam but their position is not comfortable. Due to habitat destruction by forest clearing, soil erosion, forest burning and pollution of the environment their number is declining day by day. On the other hand collection of different species by different people also causing damage to the natural population. Therefore, the butterfly group as a whole are under stress. If this conditions prevail for some more times then lots of species will vanish from this region.

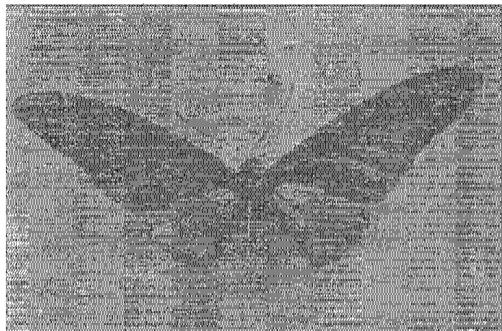
So, it is high time to do something to protect these fragile creatures from



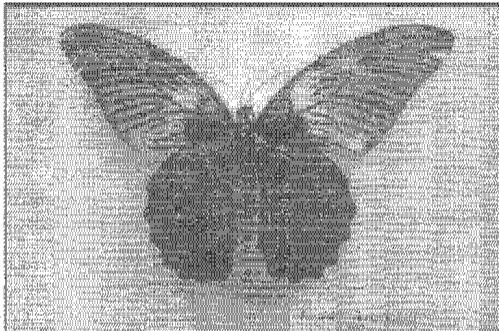
Great Windmill



Five Bar Sword Tail



Golden Birdwing



Great Mormon

clutch of extinction by adopting conservation measures. One of the best way to conserve butterflies is establishment of captive breeding farm or butterfly farm. According to the Lepidopterist from India and abroad. Assam is one of the best area for butterfly farming due to available plant resources, wide diversity of butterflies and conducive environmental conditions. The butterfly farming will help to earn revenue as a tourist spot and by selling dead specimen for decorative purposes. Farming will help

to preserve the rare and endangered insect from extinction. The State Zoo cum Botanical Garden and some reserve forest area could be a good site for establishing the butterfly farm. In Guwahati city itself there is a reserve forest area which is known as Garbhanga. Reserve forest is a treasure house of butterfly. The governemnt of Assam can establish a farm in that area which will serve as a tourist attraction point and help in conservation of some of the most spectacular swallowtail species.