

THE QUETZAL AND THE PERSEA

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Fig. 1. Therefore we have to explore the Quetzal country....

In the 1972-73 Yearbook, we wrote "...particularly in the highlands of Guatemala, native guides will inform you that only where the Quetzal bird is found there you may find wild avocados, as this rare bird eats the fruit of some Perseas. Therefore we must explore the Quetzal country...."(1). The Quetzal is the most resplendent member of a family of lovely birds called the trogons, most abundant in the American tropics(5).

Skutch(5) also wrote: "I had not yet studied the life of the most famous and magnificent of all birds ... the justly renowned Quetzal, sacred to the Indians of old. This lovely creature was one of the very first birds of tropical America to come to my attention. While still a schoolboy, I possessed a Guatemalan postage stamp that depicted a brilliant green bird with a crimson belly, a ridged crest over the head, and a remarkably long, gracefully curving tail."

Skutch later learned that the Quetzal was chosen by the Guatemalans as their national emblem, and as their symbol of liberty, since the birds would invariably die if confined in

a cage. Skutch described the Quetzal with the following words: "The males are glittering green or violet or blue on the upper parts, with red or vermilion or yellow on the abdomen. With their bright plumage, proud upright posture, gentle dignified manners, and the mellow notes of most species, they are exceptionally attractive birds, the perfect gentlemen of the avian community." The Quetzal can be rarely seen from Chiapas, Mexico down to the isthmus of Panama, where we have in recent years been exploring for wild avocados. Its habitat is the same as where we have collected *Persea* species in tropical America. We should, however, stress that in some higher mountains of this habitat we also encountered some of the wild species of avocados. The Quetzal lives then in the warmer range of this belt where we have explored for *Persea*.



Fig. 2. A Quetzal (male) in flight. Photograph: National Geographic Society.

GUATEMALA

During our explorations for wild *Persea* species in Guatemala, we have encountered Quetzals in their native habitat. The slopes of certain of the volácanos of Guatemala constitute the special habitat for *Persea* and the Quetzal, especially on the slopes of the volcanos: Atitlán, Tolimán, San Pedro, and Santa Clara on the southern shore of lake Atitlán. Here where we have collected "Aguacate de Mico", Quetzals live also. Northern Quiche has also cloud forests like Cruz Tohil with wild avocados and Quetzals. It was in northern Quiche that Skutch saw the Quetzal bird for the first time.

Alta and Baja Verapaz also have the right habitat for the Quetzal and the *Persea*. Where *P. donnell-smithii* grows abundantly we also see the Quetzal. Guatemalans believe that the Quetzal is presently found only in these two Departments: Alta Verapaz

and Baja Verapaz. However as pointed out by Schieber (4), and in this article, other regions of the country provide the right habitat for the Guatemalan national bird, as for example also in the range of Los Cuchumatanes, where we have explored intensively for *Persea*.

Close to a little town known as El Quetzal on the way to Barillas in Los Cuchumatanes, heavy stands of wild species of *Persea* are found and also the Quetzal still lives there. However these beautiful cloud forests are being destroyed by man, and the *persea* and the Quetzal will be gone forever.

Certain "Aguacatillos" constitute the food for the Quetzal. However some of these wild trees are not the true *Persea* but belong to the genus *Phoebe* or *Nectandra* (4). Guatemalans believe that only "Aguacatillos" constitute the food for the Quetzal, but we know that not only members of the Laureaceae produce fruit for this bird, but also trees in some of the other families in our American tropics.



Fig. 3. One of the authors, collecting in Costa Rica where Quetzals as well as *Persea* are found.

EL SALVADOR

The principal area we have explored in this country is the one of Los Esesmiles and El Trifino bordering Honduras. In these two cloud forests, Quetzals are also found; however, the cutting of the forest in Los Esesmiles to permit cultivation by man has diminished the population of Quetzals and of *Persea* drastically in recent years.

The crater area of volcano Santa Ana offers a fine habitat for both the *Persea* and the Quetzal; however, we did not see any Quetzals during our explorations there (2).

NICARAGUA

In this country, the Quetzal lives in the Cordillera Dariense, where we have explored for *Persea*. It lives in abundance in Santa Maria de Ostuma and in El Arenal above the city of Matagalpa. In this montane forest of spectacular character, we have studied a new species of *Persea* known to the natives as "Guaslipe" (3). Natives have pointed out that this very small fruited *Persea* is one of the important foods of the Quetzal bird (see photograph). Schieber saw toucans also eating this tiny *Persea* fruit.



Fig. 4. Montane forest of Sta. Maria de Ostuma in Nicaragua provides the right habitat for *Persea* and the Quetzal.

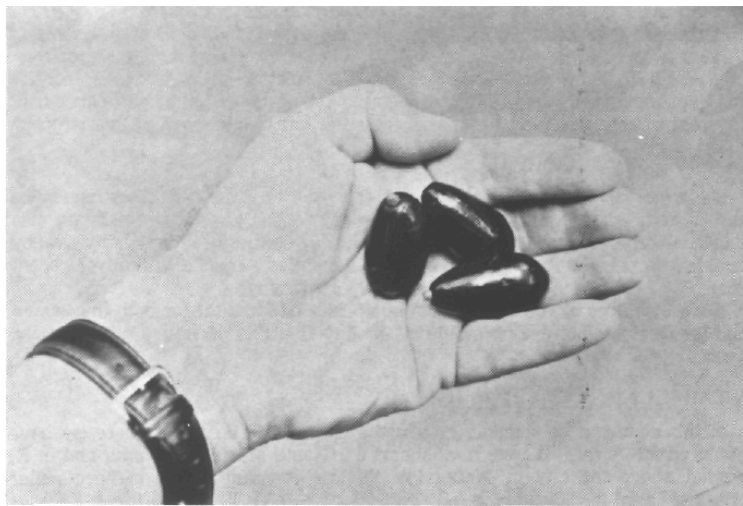


Fig. 5. Fruit of "Guaslipe", a new species of *Persea*, collected in Santa Maria de Ostuma, Nicaragua.

COSTA RICA

Skutch studied the Quetzal in Montana Azul, in the forested northern slope of the Cordillera Central, between the volcanos Poas and Barba. We (Zentmyer and Schieber) have collected *Persea* in this region of the Cordillera Central. In addition to the two volcanos mentioned above, we have also collected in the Irazu and Turrialba volcanos of the Cordillera Central in Costa Rica, as well as in the Talamanca region(6).

Persea caerulea grows in some of these regions, and this tiny fruit could be one of the foods of the Quetzal; however, this has not been reported.

PANAMA

Schieber has seen Quetzals in Cerro Punta above Boquete in Panama. They are abundant in the remaining forest of the Chiriqui Province. Several trees in the family Lauraceae including *Persea* grow also in this cooler region of Panama.

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