

# 18 YEAR-OLD XIMENA McGLASHAN Tells How She Earns \$50 a Week Catching Butterflies— She Says

By Ximena McGlashan

**A** WOMAN can earn \$50 a week capturing and propagating moths and butterflies. No capital is required, no knowledge of the science of entomology, and there are few expenses connected with the business. The work is as interesting as fishing, and so light that a child can do every part of it. There is an unceasing and ever growing demand for these insects, and each one has cash value.

If you wish to know who makes this statement, I am Ximena McGlashan, 18 years of age, and next to the youngest of the eight children of C. F. and Nona McGlashan of Truckee, California. My father wrote the "History of the Donner Party," and is an attorney, but in his younger days, say 25 or 40 years ago, he was a school teacher, and for five years devoted a great deal of time to entomological work under the direct instruction of the most eminent authorities on moth and butterfly culture of that day. Harry Edwards, the actor of San Francisco, came personally to Truckee to instruct him in capturing and breeding moths, and "Hy" Edwards, as he is known to entomologists, ranks first among the early collectors and authorities on moths. W. H. Edwards of Colburn, W. Va., a cousin of Harry Edwards, recognized as the greatest breeder of American butterflies in the world, taught him butterfly farming.

I graduated from the San Jose normal school in June last, and about the middle of July saw my father teaching one of his grandchildren how to catch and preserve a butterfly and how to rear butterflies from caterpillars. Expecting to teach school, I thought it would be well to know a little of this curious business and wanted to be taught the rudiments, so I could tell them to my pupils. Imagine my surprise and incredulity when I was told that I could make more money from the outset than I could by teaching school.

Challenging my father to prove this statement, he sugared a dozen trees down by the Truckee river, showed me how to convert half a dozen quart fruit jars with tin covers into cyanide bottles, rigged me up a lantern, and showed me how to take moths from the trees at night by placing the mouth of the bottle over the flies as they sipped the sugar on the trees, and I began work.

This was July 15, and on the first day of August I shipped away 1,500 moths and butterflies and received a check by return mail for \$75, the first money I had ever earned in my life. Meantime I was taught to gather every worm and caterpillar and feed them in bottles, boxes and barrels, and was told how to get eggs from moths and butterflies and so rear the perfect flies. In 10 weeks I have shipped 10,400 flies and received therefor a flat price of 5 cents each, or \$520, and I now have on hand 26,000 eggs, larvae and pupae which will hatch into flies next year. "Flies" include moths and butterflies.

I have exchanged the lantern for a Baldwin miner's lamp, costing \$2, which burns carbide. They can be obtained from any automobile supply house, give a very bright light, are easy to carry and do not extinguish even in a stiff wind. I have learned to search bushes both day and night for larvae, beating the bushes at night with my hands or a stick, the larvae dropping off into a tray or into a sheet spread underneath the foliage. In the daytime I catch butterflies with a net, collect eggs, larvae and cocoons from trees and flowers and shrubs and gather fresh feed for my colony of worms. It keeps me busy from 5 o'clock in the morning until 10 at night, but the work is light, full of outdoor air and sunshine, replete with interest and delightful beyond expression. I have taught five pupils and have been well repaid by having them help me with my work and give me their catches. Next year they can each enter business independently or I will take what they gather, prepare the flies for shipment and give them half of the proceeds of their catch. Thanks to the accounts which newspapers have published of my work I have received scores and hundreds of letters from men and women who wish instructions as to how to breed moths and butterflies, and in all instances I have answered these letters promptly, leaving it entirely to the gratitude of my correspondents to repay me by sending me specimens from their own particular localities. Next summer I am promised a number of pupils who will come to our beautiful mountain climate to learn the business by working with me and by personally conducting each branch of the business. They will not pay a cent for outfits or instruction, but I will be fully repaid by the catches they make during their three months' course, and at the end of that time they will be



**YOU  
Can Do  
It  
Too!**



McGLASHAN'S RESIDENCE AND ROCKING STONE TOWER, TRUCKEE, CAL.



MISS XIMENA McGLASHAN OF TRUCKEE, CAL.



EXAMINING EGGS TO SEE IF ANY HAVE HATCHED



PACKING BOXES OF FLIES FOR SHIPMENT



FEEDING LARVAE IN BOTTLES, BOXES AND BARRELS



FEEDING FEMALES IN BOXES AND PAPER BAGS

able to go anywhere on the Pacific coast and earn good money. The greatest secret of my success, the secret which will enable thousands of people to find remunerative employment at home, no matter where they live, is that scientists do not care to tell what they know to beginners. So far as I know, I am a pioneer in "free instruction" butterfly farming. I speak with authority when I say that not one person in a million on the coast knows how to properly to sugar for moths or breed flies on an extensive scale. I have taken as many as 627 moths in a single night, and I have taken 100 larvae in 10 minutes from a single bush by "beat-ing." I have had 500 eggs hatch in a day.

The most important part of it all is that no previous study or knowledge is required, and that a very successful collector may not know the name of a single insect which he captures or have the slightest hint regarding the science which is bringing him a livelihood. There is a world of study and research and scientific investigation, but it is not absolutely necessary at first.

Oliver W. Holmes in "The Post at the Breakfast Table" says: "No man can be truly called an entomologist, air; the subject is too vast for any single human intelligence to grasp." But I have demonstrated, and am demonstrating, that a mountain girl who knows nothing of the science can make \$50 per week, and at the same time prepare to make three

times that much next year. The material is in your very dooryard to bring you a livelihood. You can literally pick dollars from the bushes. You are learning the financial and experimental phases of the work, and can study the books later. You can not collect in the winter, and your farm is hibernating, hence you can master the Latin names of the insects and delve as deeply into the science as you wish.

Only the perfect specimens are saleable, yet you take a large proportion with damaged plumage and battered wings whether you use the net or sugaring. Every time you capture a few flies you sort them over and liberate the battered males and put the battered females into little paper boxes or paper bags, confining only one in each box. To obtain eggs from female butterflies requires peculiar care and instruction, for they will not deposit their eggs except when confined in a gauze bag or its equivalent, and over their particular food plant. Moths, however, will lay their eggs on the inside of any box or bag. The females must be fed each day while in captivity with a piece of dried apple soaked and thoroughly moistened in water containing a little honey or sugar. Some of them will lay for many days, depositing as many as two or three hundred eggs. These eggs will hatch in periods varying from a

few days to a few months, many species passing the winter in the egg state. Test tubes securely corked are excellent receptacles for the eggs, because you must examine them every day. Eggs are of all colors and tints and of almost all conceivable shapes. They differ from each other as greatly as do the eggs of different varieties of birds, and the entomologist can tell from the egg what butterfly or moth will be produced therefrom. During the winter eggs must be kept in cold storage lest they hatch out before their food plants are ready in the spring. If the moth or butterfly passes the winter in the larval stage the same rule applies to the little caterpillars. Cold does not injure them, it merely retards their period of maturity. Female moths and butterflies are told from the males by a glance at the shape of their bodies, the former being large and round and "fat" with eggs, while the latter have slender bodies. Male moths usually terminate in a tuft of feathers, while the end of the female is round and pointed. In some species the sexes have different markings.

The care of the caterpillar constitutes your most exacting work, but is infinitely simple. When the eggs have hatched and you do not know the food plant, introduce bits of a number of kinds of leaves into the test tube and watch from time to time whether the little larvae congregate upon any particular kind. If not, introduce bits of other leaves until you ascertain what they like. They generally eat the shell may die or produce deformed insects, but this will sustain them for a day or two if you fail to find the right food. Part of a willow leaf, a clover leaf or a blade of grass, furnishes food for most kinds of moths, for under compulsion they will eat most anything, but the leaves of whatever grows in your locality may be all tried, from day to day until you find what they like best. After a few days remove your brood of worms to a jelly glass having a tight fitting tin cover. They may remain here until they become a quarter of an inch in length. Then place them in large mouthed bottles with tight fitting covers. They require very little air. Large bottles or fruit jars make fine breeding cages for broods of caterpillars. A candy jar is ideal because you can watch the development of the larvae through the thin transparent glass. If you have hundreds of a kind, get a tight barrel, loosen the top hoop, place a covering of cloth or gauze over the open head of the barrel and fasten it down closely by means of a cord. You have a first class breeding cage. Three inches of dirt and leaf mold should be placed in the bottom of each bottle or barrel used for larvae, because they love to hide in this during the daytime, and many species bury themselves before they pupate. Put in fresh leaves of the food plant daily, take out the old food, and keep your breeding cages clean. Of course, you may build elaborate cages of wire gauze, but the simple ones are just as good.

All larvae grow by molting, those of butterflies molting five or six times. During this period they are dormant and must never be disturbed, else they may die or produce deformed insects. When the larvae spin cocoons, as some do, or pupate in the ground, as most do, you have no further work with them except to remove them carefully from the bottles to the hatching boxes or barrels, covered with gauze, until the perfect, full fledged moth or butterfly emerges from the pupa. Expenses are trifling in this occupation. Sixty cents buys a pound of cyanide cakes, a butterfly net can be made with a loop of No. 9 wire, a tin ferule and a bamboo handle, with a net made of bobnet or other light, gauzy material. Entomological pins must be used in pinning the insects, costing \$1.25 per single thousand and less by the quantity. A small pair of forceps to pick up the insects, for you must not use your fingers except in pinning them, will cost half a dollar. Insect cork, which you fasten by means of flour paste in the bottom of cigar boxes, costs 25 cents per square foot. Pin your flies in these boxes and pack the boxes in a large case, using plenty of excelsior, and ship them by express. The party to whom you ship usually furnishes boxes and pins. Mixtures for sugaring cost only a few cents per gallon. A large pair of forceps is used to grasp the pin underneath the fly and press it down firmly into the cork. Pin the insects through the thorax. Butterflies may be shipped in little three-cornered envelopes made of newspaper. All the details can be easily learned. Each locality has its own particular variety of flies, some of which are found nowhere else. The butterflies of the coast have been thoroughly worked up, but there has been very little systematic collecting of moths, and new varieties may be found in every county. A much larger number can be taken in the valleys than in the mountains, but there will be more that are common. Each one has some value, however, and is wanted by some one, so take all kinds until experience teaches which are the more valuable kinds. A feature of night collecting which most women will dread, except where the work can be done in the dooryard or close to home, is being out in the dark alone. It is not always convenient to have company, and it is much better to go alone, because any unnecessary noise will cause the moths to fly away. Being a mountaineer, I am never a bit afraid to go anywhere that my work calls me, and have frequently been miles from home in the darkness, but I have yet to meet with an unpleasant episode. Everybody knows that I am attending to my legitimate business and I am never molested. The newest make of the automatic revolver is a companion that banishes fear, especially as I am a pretty good shot, but aside from the confidence it inspires, it is quite useless. A sugaring route includes only a few trees and is hardly more than a hundred yards in length, as a rule, but occasionally one lays out a route which can only be reached with a bicycle over a lonely mountain trail. Such routes sometimes yield the rarest catches. Our altitude is about 6,000 feet, but many of the best collecting fields in this locality are more than 7,000 feet. We have single moths and butterflies which are worth \$5 apiece, and one variety of beetle brings \$5 a specimen.