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in search of the Tres Marias Double Yellow-headed Parrot

by Walt Hansen
San Diego, CA

In 1976 I decided to find out about psittacine birds, so I purchased a couple of elderly parakeets. Within a few months I learned from observation and extensive reading that keeping parakeets was quite easy, depending mainly on common sense, so I decided to branch out and gradually worked my way up through the more common types such as a Finsch's Amazon, a Mexican redhead, a pair of half-moons (which produced two lovely chicks for me, thereby deceiving me into thinking that sexing parrots by observation wasn't really so difficult!), and finally on to yellow napes and the delightful double yellowheaded Amazon parrot.

Along the way I joined San Diego's Hookbill Hobbyists Club and soon began hearing about the "fabulous" Tres Marias double yellowhead. I started a systematic search of the literature on parrots and soon discovered that information is scarce and sketchy regarding this subspecies of *Amazona ochrocephala*. Bates and Busenbark, in their book "Parrots and Related Birds,"¹ have only this to say: "Restricted to the Tres Marias Island (sic), this subspecies can be distinguished from the Mexican Double Yellow Head by its larger bill and head, and a brighter, more extensive yellow head. A faint bluish tinge transforms it into a brighter green." Not bad as far as it goes, this description is hardly definitive. A.E. Decoteau in his book "Handbook of Amazon Parrots"² writes the following: There is definitely more yellow on the entire head and throat, extending down onto the neck and breast. The back and wings are lighter green than those of *A. o. oratrix*. The bend of the wing has much red mixed with yellow; the thighs are a rich golden yellow. The bird is larger and has a longer tail than *A. o. oratrix*." This description fits exactly the yellowhead that we in the San Diego area, at least, have been calling "Tres Maria," but is it? I'll get to that shortly.

Decoteau also describes what he calls a "Magna Double Yellowheaded Amazon."

He writes: "An exceptionally large double yellowhead Amazon, two to three inches larger than *A. o. oratrix*, this bird from southern Mexico rivals the Tres Marias Amazon in size and beauty. If anything, the magna lacks some of the yellow color that the Tres Marias exhibits and seems to be a darker green in general body color. Not all ornithologists consider this bird sufficiently different from *oratrix* to be classified as a separate species, but I think that it should be and will treat it as such."

What I find of interest here is that, according to Rosemary Low in her book "The Parrots of South America"³ *A. o. magna* was first described by Monroe and Howell in 1966.⁴ Since double yellowheaded Amazons were discovered and described over 100 years ago - in 1871 by Grayson, who named the bird *Chrysotis leuallantii* - one wonders where the "magna" was hiding during all those years, especially since it is allegedly found along nearly all of the east coast of Mexico from Tamaulipas to eastern Tabasco. As for the magna's appearance, Ms. Low writes: "larger than *A. o. oratrix*. As large as *A. o. tresmariae*, but lacks the bluish cast to the green plumage."

According to the "Distributional Checklist of the Birds of Mexico,"⁵ the habitat of the "standard" double yellowhead on the east coast of Mexico covers all the area listed for "magna" and then some. Joseph M. Forshaw in his book "Parrots of the World"⁶ does not list any *A. o. magna*, but does state that birds from the Caribbean slope of Mexico tend to be larger than those from the Pacific side. So it does not appear to me that the Tres Marias subspecies is involved in this particular confusion. Finally, Forshaw described *A. o. tresmariae* as "adults similar to *oratrix*, but yellow of head extending down on to neck and upper breast; upper parts slightly tinged with blue; averages larger in size and with longer tail." I would like to point out here that Forshaw's description of the adult

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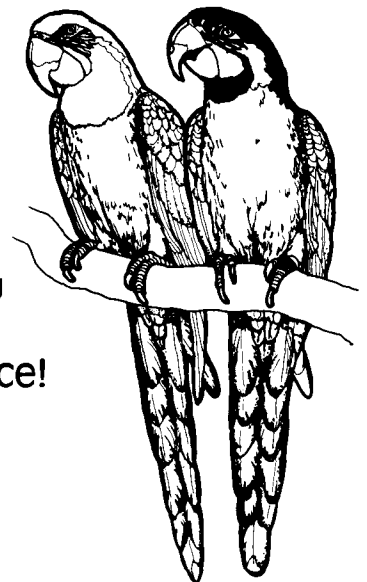
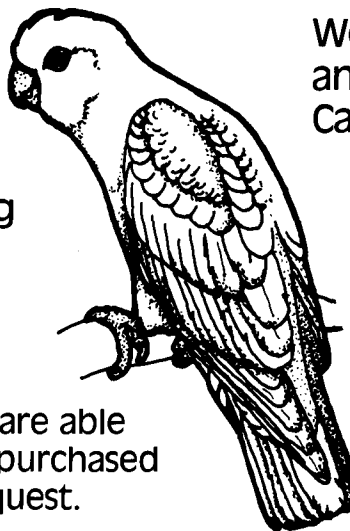
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standard double yellowhead (*A. o. oratrix*) fits almost perfectly what we in San Diego have been calling a Tres Marias. He wrote: "Adults: Entire head and throat yellow; bend of wing pale red intermixed with yellow; carpal edge and thighs yellow; bill horn colored tinged with gray towards base of upper mandible. Immatures: Head entirely green except for a patch of yellow on forehead; bend of wing green; carpal edge yellowish-green."

Having seen many specimens, both young and old, of *A. o. oratrix*, I have observed that the grey in the beak is only present in very young birds, and that fledglings also *always* have red feathers on the bend of the wing right from the start. So even Forshaw may make a little error now and then. Finally, Arthur Freud in his book "All About the Parrots" says that "*A. o. tresmariae* resembles the Double Yellow Head but has a much greater area of yellow extending over the head and neck at an earlier age. This subspecies can also be recognized by its massive head and beak, generally greater length and large red markings on the bend of the wing." He omits the usual mention of yellow thighs. So, it is evident that every writer sees and describes these mysterious Amazon parrots a little differently, whether they have actually observed them or not.

In 1982 I couldn't stand all the confusion and mystery any longer, so I made a trip to Mexico City to find out what was to be seen at the Mexico City Zoo in Chapultepec Park. Well, folks, there are quite a few fine parrots there, but NO Tres Marias double yellowheads! I then traveled to San Blas on the West coast of Mexico, the nearest point on the mainland to the Tres Marias Islands, some 65 miles off shore. It is from this small port that E.W. Nelson and others sailed in 1897 in an expedition of the Biological Survey Division of the U.S. Department of Agriculture. More about it shortly. I found, however, that all traffic to and from the Islands now uses the large, modern port of Mazatlan, so I immediately went to that city and located the offices of the Tres Marias Agency.

There I met Mr. Cristobal Castillo who was most helpful and informative. Not only did he confirm the existence on the islands of "thousands" of yellowheaded parrots, he gave me the address in Mexico City of the Department of Prevention and Social Readaptation. Since Maria Madre Island is the site of a Federal Penitentiary, it falls under the jurisdiction of the Department and travel to and from the island is, of course, very carefully controlled. Mr. Castillo seemed quite sure that I would receive permission to visit the island if I would apply for it. Some time after returning home I wrote to the Director General

in Mexico City but, probably due to elections and changes in key government personnel, I had not received a reply by February, 1983, so I flew again to Mexico City, armed with all the documentation I had gathered regarding the islands and the parrots, plus pictures of my own birds.

The receptionist at the Department listened carefully to my explanation of the reason for my visit, then immediately went to the office of Mr. Martinez Lavin who is in charge of travel control. Within five minutes the receptionist returned and ushered me into Mr. Martinez's office. During a 20 minute conversation I described the reasons for which I wished to visit Maria Madre Island, presented my documentation and hoped for the best. Mr. Martinez Lavin told me he would relay my request to the Director General, Licenciado Antonio Garcia Orozco, and that I should come back the next day. When I returned, my travel permit was ready! The courtesy and efficiency of everyone in the Department was outstanding and I wish to thank the Director General and his entire staff for their helpfulness. Not only did I receive permission to spend eight days (April 14 to 22, 1983) on the island, but I was provided with transportation out and back on a Mexican Navy vessel and housing while there. My only expense, other than round trip air fare to Mazatlan, was for meals and they were very low priced.

The 125 mile trip over to the islands from Mazatlan is rugged. Twelve hours outdoors overnight on the deck of a minesweeper is not much like sailing on the "Love Boat" - but the price was right! I knew in advance to pack food and water along, but I sure could have used an air mattress and a blanket. However, as the islands came into view about 8AM in brilliant sunshine, the hardships were quickly forgotten and it was with great pleasure that I stepped ashore after a night of rocking and rolling over the bounding main.

The Federal penal colony on Maria Madre Islands is not confined to a few buildings but occupies the entire island and has been under new management, so to speak, since 1977. As a result, the former "Devil's Island" reputation has been dispelled. The Director, Lic. Francisco Castellanos, is a young, progressive, university-educated man who has banned from the island drugs and alcohol in any form. All plant and animal life is protected. Castellanos has instituted educational and retraining programs and has modernized and improved the housing and other facilities on the island. Television from Mexico City is available by satellite!

After lunch at the restaurant in Balleto, I was driven about a mile north by the Public

Relations Officer, Miguel Manzano, to one of several large guest houses where I was given a room. As luck would have it, the house is directly across the road from an area of tall trees where literally hundreds (if not thousands) of Tres Marias double yellowheaded parrots congregate daily. It was a sight for sore eyes and I spent a large part of the next three days standing under the trees (but not under the birds!) observing all those beautiful creatures with a pair of 7x35 wide angle binoculars. The parrots are once again relatively unafraid of humans and I was able to approach to within 20 or 30 yards before they would take wing and fly to another nearby tree.

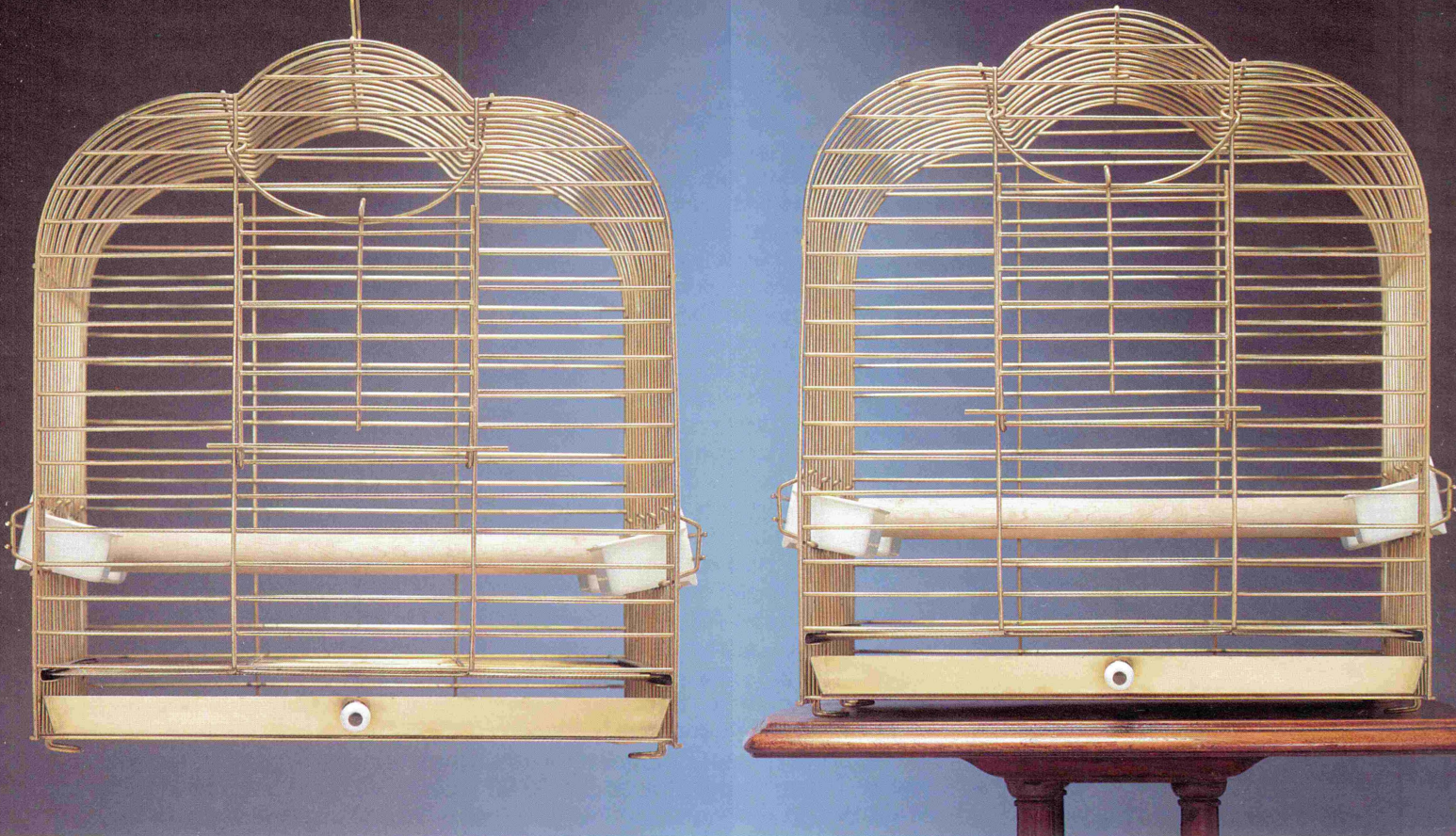
On the fourth day I undertook a 14 mile hike from the coast to the top of the highest mountain on the island, some 2,020 feet above sea level. The route passes through a deep canyon approximately three miles from the coast. Huge virgin jungle trees festooned with vines and dotted with bromeliads cast a deep, cool shade over the trail. High up in the trees I heard and then saw several pairs of parrots perched or climbing about in the tree tops as well as on huge limbs near tree trunks where nest holes very likely are found. Even with binoculars I was unable to observe any young, so they must have been still in the nests, or were nearly grown and out foraging for food. There is no water available in this part of the island during the dry season, but I was told that on the north west slopes there are two springs and a small brook.

After the trail had passed through the canyon area the terrain opened into green rolling hills with smaller trees. I saw no parrots in this area nor did I find any in view from the top while gazing at the magnificent panorama which included the islands of San Juanico (not Juanito as seen on U.S. maps) to the north and Maria Magdalena and Maria Cleofas to the south east. Later exploratory hikes to the north and south ends of Maria Madre Island turned up no parrots at all. So, in mid-April, at least, it appears that the birds confine themselves to the area in and around Balleto (the main village and seaport) because of the fruit trees found there, and to the nesting areas which are very isolated.

In view of the numbers of half-grown and nearly grown fledglings I was able to examine and photograph in various homes in Balleto where they were being hand raised after removal from nests, it appeared that the nesting season was nearly over by late April. There is considerable variation in the data on this as given by various ornithologists.

This is what E.W. Nelson⁸ wrote about these parrots following his 1897 visit to the islands: "The yellow-headed parrot is a

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common resident and always nests in holes high up in large trees in the forest. Half-grown young were found the middle of May. [I found them the middle of April.] The birds were usually seen flying about the forest in pairs, but congregated in flocks of from six to twenty or more at their feeding places. They feed upon fruits of various trees, and during May the fleshy pods of *Pithecolobium dulce* formed their staple article of diet." I also observed them eating mango flowers and tiny fruit.

Nelson went on to say that "comparing the series taken on the islands with specimens from both coasts of the Mexican mainland certain slight differences are noticeable, but are too poorly defined to be worthy of subspecies recognition. [He later changed his mind.] The island birds are usually apple green on the dorsal surface and mainland specimens are more of an oil green; the ventral surface has a more decided bluish wash; there is also a tendency to a richer suffusion of orange and orange red on the yellow feathers about the necks of old birds." Notice that Nelson makes no mention of either the red and yellow feathers on the bend of the wing or of the yellow on the thighs, because, apparently, there was little or no difference between the island and the continental birds in this respect. He does state that "the island birds are a little larger than those of the mainland, with a proportionately smaller bill and shorter tarsus." My observations confirm Nelson's description of the Tres Marias parrots. Although I can't verify by actual measurements the size difference, it does appear to be so. What was most apparent to me is that the island birds differ visibly from mainland birds in only two ways: the bluish cast to the lower neck and breast feathers, and the richer yellow color of the head. One old male that I photographed literally had a red nape. (I have also observed this feature in captive birds in San Diego, but they lacked the blue wash on the breast.) The bend of the wing and the thighs of the island birds I saw are identical in color to their mainland counterparts. (I have an alleged Tres Marias with totally yellow thighs and red/yellow shoulder caps over an inch wide. This bird, moreover, has a strong yellow tinge to its breast feathers.)

In 1955 Kenneth E. Stager⁹ of the Los Angeles County Museum, and others, studied the avifauna of the Tres Marias Island in late April and early May. Here is his description of the yellowheaded parrots he found. "The Tres Marias Yellowheaded Parrot is a well-defined race; all birds examined show the very extensive amount of yellow on the head and neck in contrast to the lesser amount exhibited by the mainland race. [Very true! I observed

fledglings with as much yellow on the head as a four year old *A. o. oratrix*.] The light green of the back as well as the bluish-green wash to the breast is also evident when a series of *tresmariae* is compared with skins of *oratrix* from Colima."

As a possible explanation of the development of *tresmariae*, Stager wrote the following: "At the present time the range of *A. ochrocephala* on the west coast of the Mexican mainland extends (northward) only to the State of Colima and therefore does not reach Nayarit opposite the Tres Marias Islands. It is quite probable that this species had a greater northerly range at a much earlier time and extended to the Tres Marias prior to the islands' being cut off from the mainland. With the formation of the island group as a result of the subsidence of a former peninsula which probably extended northwestward from the Jalisco coast just north of Banderas Bay, the peninsular population was isolated. In the islands the species has maintained itself and evolved into the present recognizable race, while on the mainland it can be postulated that the range of the species has withdrawn to its present line in Colima," about 120 miles southeast of San Blas.

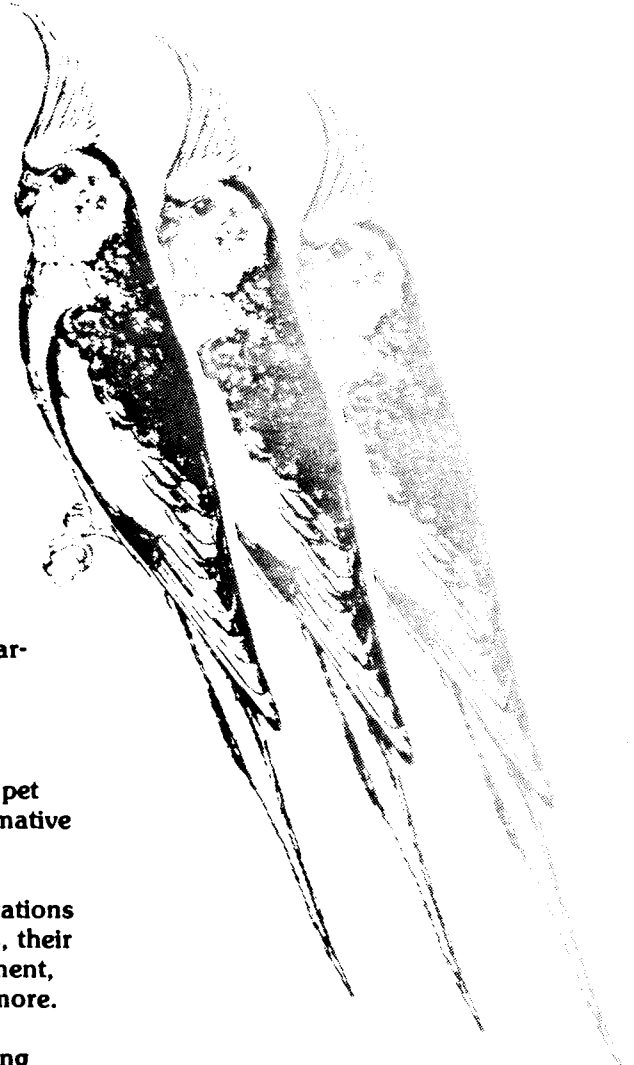
M.E. McLellan wrote in his "Notes on Birds of Sinaloa and Nayarit, Mexico in the Fall of 1925"¹⁰ that "Amazona oratrix tresmariae Nelson" is fairly common on Maria Madre. Seen in pairs and flocks on all parts of the island, "the persecution to which they have been subjected at the hands of the residents has made these parrots very adroit in avoiding danger, and, although they proclaimed their presence by noisy cries, they took wing on the slightest hint of peril." Mr. McLellan gave no description whatsoever of the birds! Let me mention again that the parrots on Maria Madre Island are again fairly tame because they, and all other animal and plant life, are completely protected.

In "A Review of the Avifauna of the Tres Marias Islands, Nayarit, Mexico,"¹¹ Grant and Cowan wrote in 1964 that their observations in May to August suggested most young appear in July and August, possibly due to the rainy season (starting in June) causing plant growth to make more food available. The authors stated that they observed the parrots breeding on all four islands, but included no description of the birds in their article!

The trouble with the above information, in my opinion, lies in two phrases: "most young appear in July and August" and "observed the parrots breeding." Does "appear" mean "hatch" or "emerge from the nest?" Since Amazons require 13 to 14 weeks of growth between hatching and independence, after four weeks of incubation, preceded by several weeks of

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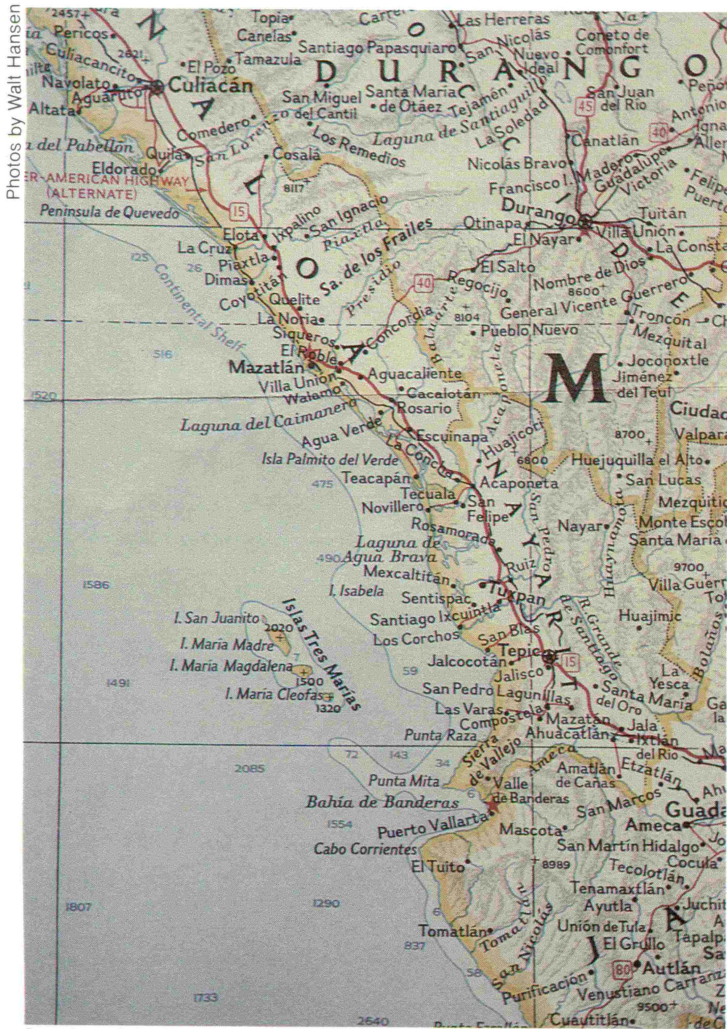
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Location of the Tres Marias Islands off the west coast of Mexico.

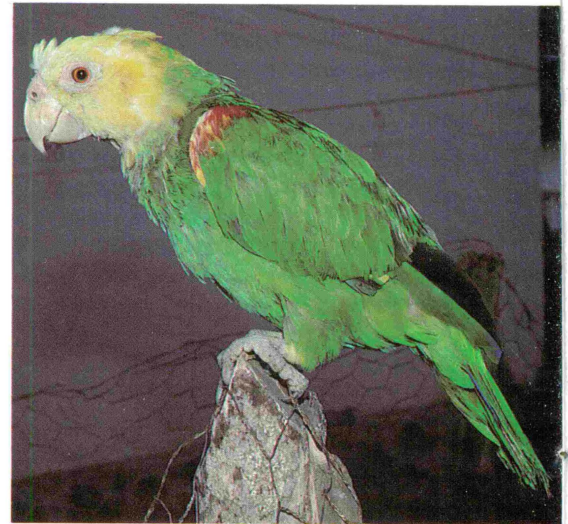


Tres Marias double yellow-headed fledgling. Note the large amount of yellow on head and face, and bluish cast on breast.

“breeding,” the whole cycle takes at least 21 weeks or about five months. Does “breeding” mean mating, or the entire process of producing and raising young? Since I observed half-grown young in mid-April, it would seem that mating probably

takes place in January and February, incubation in February and March and hatching in March and April. Obviously, all pairs do not begin and complete each stage at the same time. A few weeks variation is normal, but since most of these

View south from highest point on Maria Madre Island with Maria Magdalena island in the distance.



A Tres Marias double yellow-headed 15 to 16 months old. Note that the red and yellow feathers on the shoulders and the yellow on the legs are very restricted—similar to the commonly kept double yellow-headed.

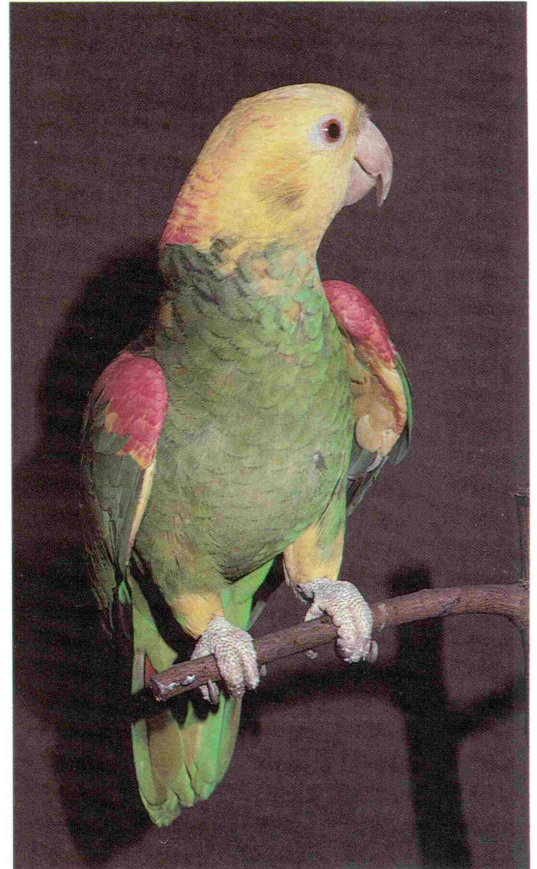
behaviors are believed to be triggered primarily by the amount of daylight at certain times of the year, (which doesn't vary at all from year to year) there is probably not a great deal of change in the annual beginning and ending dates.

Even Nelson's statements are sometimes unclear, although I consider his observa-



A trio of "super" double yellow-headed youngsters hatched in San Diego. At this age (2 to 3 months) they resemble young Tres Marias parrots except for the absence of a blue cast on their breast feathers.

tions and descriptions to be the most accurate and reliable of any. He wrote: "Half-grown young were found the middle of May. The birds were usually seen flying about the forest in pairs . . ." Does he mean that half-grown were seen flying about, or were they still in nests and the adults were flying about? If he observed



A "super" double yellow headed. (Could this bird be a magna?) Note the red tinged nape feathers, extensive red on shoulders and the yellow leg feathers.



Above, a standard double yellow-headed about four months old. The yellow is confined to the forehead and front of the crown.

A two year old double yellow-headed. The yellow on its head is about equal to the yellow on the head of a fledgling Tres Marias parrot.

young birds flying in mid-May, that fits perfectly with my observations of nearly fledged young in mid-April. What I am trying to illustrate through all of this detail is that both observations and descriptions must be carried out with utmost accuracy and precision. Words and terminology must be clearly defined and properly used in order to avoid confusion or misinterpretation.

Frankly, I was disappointed in the appearance of the Tres Marias double yellowheaded Amazon parrot! Let me ex-



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plain. The main reason is that it doesn't look much different than the regular double yellow. The red and yellow feathers on the bend of the wing are no more extensive. The yellow on the legs is mainly on the inner surface. The size difference is not all that striking. The two outstanding features that I observed are as follows: the young, fledgling birds have far more yellow on the head and face - at least equal to that of a four year old regular yellowhead; and there is a definite bluish cast to the green of the breast feathers. It is especially noticeable in the feathers adjacent to the yellow on the lower neck below the beak. In fact, in some birds the effect is almost that of a blue band between the yellow neck feathers and the rest of the birds' breast feathers. In some birds the blue cast extends downwards nearly to the legs. The intensity of this blue wash depends somewhat on the angle of the light striking the feathers, but it is always visible to some degree.

So, we are back to the question mentioned earlier - what are the larger, very colorful double yellowheads with the wide red/yellow epaulets and the all-yellow legs? I have sent for the original publication in 1966 by Monroe and Howell in order to make comparisons. Perhaps next spring I'll be making a trip to both coasts of Mexico to observe first hand these magnificent parrots. In the meantime, if anyone offers you a "guaranteed" Tres Marias parrot, I recommend that you check it carefully for the blue color on the breast, in sunlight if possible.

POSTSCRIPT

Finally, about a month after sending my article to the WATCHBIRD, I obtained a copy of the paper listed under reference number 4. I believe the information in it clarifies the confusion I encountered in the literature about the identities of the various types of double yellowheaded parrots. This situation is also a perfect illustration of the pitfalls surrounding my attempts to deduce logical conclusions from faulty or incomplete data. In other words, don't believe everything you find in books written by people who have gotten most of their information from second or third hand sources.

Here is what Monroe and Howell have to say about our parrots. "Yellowheaded birds are found on both slopes of Mexico [including the Tres Marias Islands off Nayarit] south into Oaxaca and Tabasco . . . Adults of Mexican populations of the yellowhead color type are all very similar in appearance and have sometimes been considered a distinct species, *Amazona oratrix*. The head and throat (of adults) are entirely, or almost entirely, yellow, and there is usually much yellow on the lower thighs. The bend of the wing is extensively marked

with red or red and yellow, and one or both of these colors are usually conspicuously present on the alular edge of the wing."

"Nelson (1900) described the isolated population on the Islas Tres Marias as *tresmariae*, distinguishing it from mainland birds on the basis of a 'light, grass green back, more bluish green underparts and much greater extension of yellow on neck, especially on the underside.' This insular subspecies has been widely recognized, but the mainland populations of both slopes north of the Isthmus of Tehuantepec have always been regarded as a single taxon, currently the subspecies *oratrix* . . . The Pacific and Atlantic slope populations are completely separate from one another for their entire range . . .

Monroe and Howell go on to say that "we have examined and measured 35 specimens from the Atlantic slope, 14 from the Pacific slope mainland and 13 from the Islas Marias. . . It is clear that three distinct populations of yellowheaded parrots are present in Mexico, each one highly isolated from the others: (1) a large form, *tresmariae*, confined to the Tres Marias Islands; (2) a much smaller form occupying the lowlands of the mainland Pacific slope from Colima to eastern Oaxaca (the type *oratrix* is a representative of this population and therefore that name applies to the Pacific slope birds); (3) a large un-named form ranging along the Atlantic slope lowlands from Tamaulipas to Tabasco, here described by us as a new subspecies," to be called *A. o. magna*.

"Probably the Atlantic slope population has not hitherto been recognized as distinct because of the scarcity of specimens from the Pacific slope and because of the large size of *tresmariae*, which is comparable to that of *magna*. The latter circumstance gave the impression that there was no reason to expect mainland Pacific slope birds to be 'small,' and also that *tresmariae* was, despite its isolation, a poorly defined subspecies differing only in dubious color characters. When compared with the much smaller Pacific slope *oratrix*, from which it is almost surely derived, *tresmariae* is seen to be a well-differentiated form. Its large size shows convergence with *magna*, but the two populations are completely isolated and have probably never been in closer contact than they are at present."

I agree with the above descriptions and conclusions except that I would say that *oratrix* is only "somewhat" smaller than *tresmariae*. *Oratrix* also has the least amount of yellow on the lower, inner thighs. Finally, *magna* and *tresmariae* adult males frequently have a large area of yellow feathers on the nape tinged or edged with red. The yellow on the head and neck of *oratrix* is usually rather pale when com-

pared with the other two types. Finally, the red/yellow feathers on the bend of the wing are in *oratrix* restricted to a rather narrow area. *Tresmariae* may show a slightly wider band and *magna* the widest, up to two inches of colorful feathers capping the entire "shoulder" of some birds. Lastly, *magna* males usually have considerable yellow extending down onto the breast area in splotches. In other words, an adult *magna* is a gorgeous, colorful bird.

The remaining question now is, how to explain the presence in Southern California of what must be *magnas* rather than *tresmariae*? I would say that either they are transported to western Mexico and then are imported into California, or they are sent west after coming into the U.S. in Texas. In any case, they are few and far between. As for true *Tres Marias* amazons, I believe that the very few that reach the west coast mainland of Mexico become mixed in with the far more numerous *oratrix* and lose their real identity. The principle visible difference between the two races is the blue hue in the breast feathers of *tresmariae* and this color could easily be obscured by dust and dirt acquired during shipment and quarantine. The color may even fade due to change of diet after leaving the islands. In any case, I have yet to see what I consider to be a true *Tres Maria* anywhere but on Maria Madre Island.

Although I now do feel that the mystery of the yellowheads has been solved, I will not bet any money on it until I have traveled to the east coast of Mexico for a first hand look at *Amazona ochrocephala magna* in its native habitat.

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