

C.F.O. Journal

The Colorado Field Ornithologists' Quarterly



Volume 16, Number 1

Spring 1982



C.F.O. JOURNAL

A quarterly publication of the Colorado Field Ornithologists, c/o Judy Pyle, 2242 16th Street, Boulder, Colorado 80302. Controlled Circulation postage paid at Boulder, Colorado.

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CFO JOURNAL is devoted to the field study of birds in Colorado. Articles and notes of scientific or general interest, and reports of unusual observations, are solicited. Send manuscripts, with photos and drawings to: Peter Gent, 55 S. 35th St., Boulder, CO 80303. Send rare bird reports to: CFO Official Records Committee, c/o Zoological Collections, Denver Museum of Natural History, City Park, Denver CO 80205.

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TABLE OF CONTENTS

| | PAGE |
|--|------|
| FROM THE EDITORS | 2 |
| 1982 ANNUAL CONVENTION | 3 |
| THE THIRD DMNH/CFO TAXONOMY CLINIC Allan R. Phillips and Charles Chase | 5 |
| SEASONAL REPORT--SPRING 1981 Frank Justice | 16 |
| A PEREGRINE AS PREY IN A GOLDEN EAGLE EYRIE Thomas E. VanZandt | 20 |
| OCCURRENCE OF SAGE GROUSE ABOVE TREELINE Richard W. Hoffman and Brian S. Cade | 22 |
| FIELD TRIPS | 24 |

Cover Photograph: Steller's Jay in Bluebell Canyon, Chautauqua Park, Boulder by Bruce Webb.

Bruce and Jeanne Conry lived in Chautauqua for several years while attending the University of Colorado in Boulder. They are now living in Santa Barbara, California with their son, Ryan Patrick, who was born last December.

FROM THE EDITORS

The CFO Journal needs more articles and artwork from its members. Anything to do with ornithology and birdwatching in Colorado is welcome ranging from field identification, through unusual occurrences of common or rare species to short sight guides of your favorite local birding spots or where to find species that are very local in Colorado. Artwork, both drawings and photographs, are needed for the cover and can also be used inside the Journal as well. Thank you.

Please take note of the date of this year's annual convention which is given on the next page, and also of the CFO field trips for this spring, which are on the last page of this issue.

PETER GENT and TERRY ROOT

SECOND ANNUAL COLORADO FIELD
ORNITHOLOGISTS' PHOTOGRAPHY CONTEST

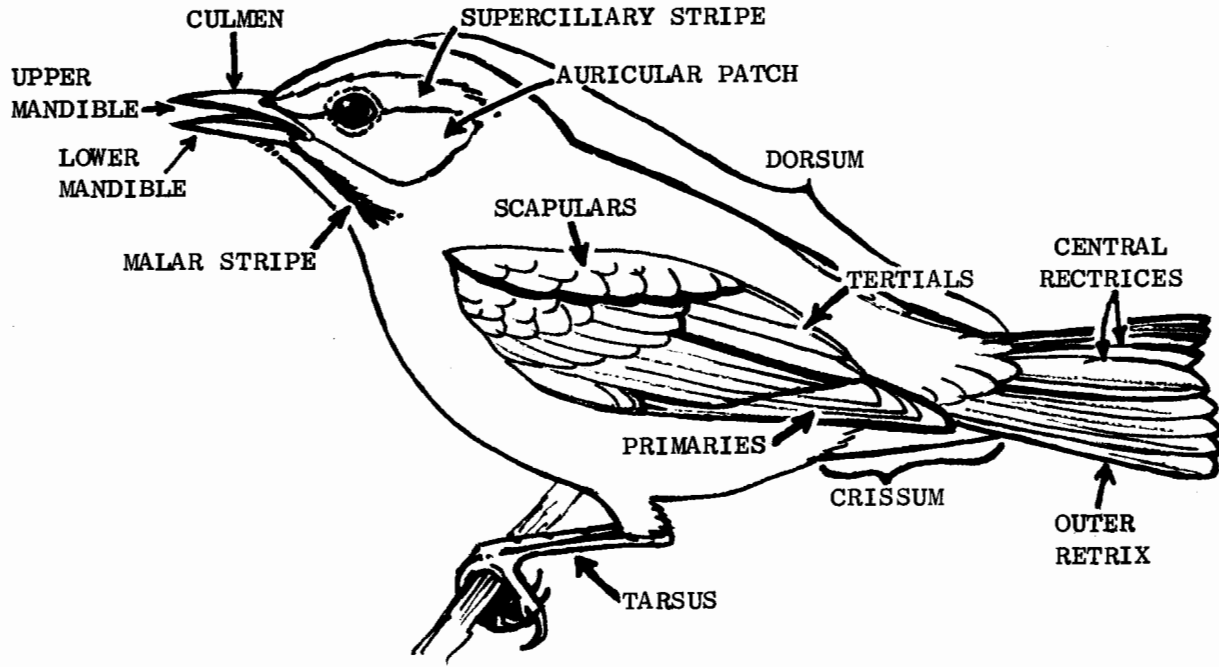
The CFO will be offering a 1st, 2nd, and 3rd prize award for the best photo entries of living, free birds taken in Colorado. Each contestant is limited to six entries, which will be judged on the basis of technical excellence, artistic merit, difficulty and ornithological value. Please identify each print or transparency with your name, and furnish an addressed, stamped return envelope. Winning entries will be displayed at the 1982 CFO Annual Convention 11-13 June in Gunnison, Colorado. The deadline for entries is 15 May 1982, and should be sent to David L. Alles, 1520 Belmont Drive, Longmont, CO 80501.'

1982 ANNUAL CONVENTION

The twentieth Colorado Field Ornithologists' annual convention will be held during the weekend of 11-13 June 1982 in Gunnison. The convention and accommodations will be on the campus of Western State College in Gunnison. Camping space will be available at Curecanti National Recreation Area which is by Blue Mesa Reservoir, 20 miles west of Gunnison. Registration will be on Friday the 11th. On Saturday, there will be morning field trips, followed by the papers session in the afternoon. The banquet will be held that evening. Further field trips will be held on Sunday the 13th. Further details and a registration form will be mailed to CFO members at a later date.

CALL FOR PAPERS

Anyone wishing to present a paper at the CFO Annual Convention in Gunnison should send a title and short abstract to Peter Gent, 55 South 35th Street, Boulder, CO 80303. Each talk is usually about 20 minutes long with time for questions. CFO members, especially from the western slope, are encouraged to give talks about regular observations they make around their own areas or anywhere in Colorado.



TOPOGRAPHY OF A BIRD

THE THIRD DMNH/CFO TAXONOMY CLINIC
with Dr. Allan R. Phillips
September 1980

Cosponsored by:
The Denver Museum of Natural History
and
The Colorado Field Ornithologists
Transcribed and edited by
Charles Chase III
Denver Museum of Natural History

FALL WARBLERS

PHILLIPS: The first thing which should be stressed in fall warblers and in many other birds is what George Sutton refers to as the "facial expression." This is extremely important in identification. If I take these two birds by the field guides, I don't know quite what you'd call them. They have white wing bars, as almost all Dendroica's do in the fall, and they have a distinct eye stripe and spot under the eye, which is not too uncommon. Notice there is a distinct light line on the sides of the back. This is a very unusual pattern and this would tell you at once that these are Blackburnian Warblers. But they do not have the field characteristics of Blackburnians--they're quite pale yellow on the throat.

Question: Where's the white line?

PHILLIPS: Right here along the edge of the scapulars. This one doesn't show it too well. This one, fortunately, is a little better and you ought to see it. Notice the yellow throat and yellow breast. Also the line over the eye is becoming quite yellow. This could lead to confusion, if you weren't careful, with the Townsend's Warbler, which is fairly similar but has more contrast on the sides of the face. Its cheeks are rather dark, the line over the eye is always yellow, and Townsend's tends to be more heavily streaked, which I'm not sure you can use as a field character.

Question: What about the more greenish back color?

PHILLIPS: That's fine if you can see it. Also, if you don't run into one of those hybrids between Townsend's and Hermit which can tone down both streaking and the green on the back. You have these pitfalls.

The main thing about identifying birds at any season, anywhere, is to remember that if you're working from a field guide, that field guide gives you the typical color of the average bird, maybe in the brightest breeding plumage only. Fall and winter plumages are not well covered. I might mention off hand the characters for Common Tern. This is identified as having a red bill, which is very discon-

certing when dealing with terns in Mexico where they all have black bills with small yellow tips. I thought they were Cabot's Terns until I shot one and saw they were actually Commons that retain that bill color until they're ready to breed.

Question: When you started out, you mentioned "facial expression." What do you mean?

PHILLIPS: Here in this bird, we have a long yellow line under the eye with the distinct blackish line below it. That tells us at once that it's a Prairie Warbler. Notice the superciliary stripe. Here we have a bird which is quite obscure looking. It shows a whitish line over the eye, but not extending very far back, and a distinct white arc on the lower eyelid: otherwise the head is solidly dark except the whitish throat. There are no wing bars and thus we have a Black-throated Blue. The books all tell us there is a whitish patch on the primaries. If you look very closely, you can see a little, but I have seen specimens that have no patch visible. Therefore we should learn the facial pattern. It's a very obscure looking bird. Here I have some Black-throated Greens. They have a dark auricular patch, which is not as dusky as Townsend's, but it is not all yellow with just a little line as you get with Hermit or Golden-cheeked. There is also a tendency to have a light wash of yellow down the undersides, rather than white or more definite yellow as in Townsend's. This is a tricky group. The way to tell these in the fall, or anytime, is by the call. The Black-throated Green has a chip, which to my ear is identical to the Black-throated Gray. In Colorado, that won't be too much of a problem because these hybrids of Townsend's and Hermit tend to go farther to the Southwest.

Question: Does the Black-throated Gray cross with Townsend's?

PHILLIPS: Not as far as I know. All members of this yellow-cheeked group have distinct breeding ranges except Townsend's and Hermit. If the others didn't, chances are there might be hybrids.

Sometimes we have quite striking variations which are racial characters. Myrtle and Audubon's are the same species but are quite different in breeding plumage. In fall, they are by no means so simple. Notice there is a definite tendency in the Myrtle to have a white streaky breast, whereas the Audubon's has a weakly streaked breast with a brownish wash across it. That is a pretty fair character. Don't rely too much on one character. Use a consensus. We don't rely entirely on the chest; we don't rely on the throat at all in fall. One thing usually fairly evident in the field, but not in the skin, is the side of the head. The Audubon's has a quite uniform side of the head, and the Myrtle a quite visible superciliary with darkened auricular patch, that is the most reliable character with the call. The call note of Myrtle and Audubon's are distinctly different. Can you see the facial difference here?

Questioner: No.

PHILLIPS: You have to look closely and they are not all that easy. If in doubt, you can put down Yellow-rumped.

Questioner: That's by far the preferable system.

PHILLIPS: Not always. I think we should try to learn as much as we can and not stop at the level of species. I'm going into this matter of Myrtle and Audubon's for two reasons: First, to show that it isn't as easy as the books used to make it appear; and second, to show we can learn below the level of species and I think we should. I don't think the occurrences in Colorado of Baltimore Orioles and Indigo Buntings, if they are lumped, is any less interesting as subspecies than it was as species. They're still distinct entities. We have to be careful, especially across E. Colorado where we get birds that are neither Baltimore nor Bullock's, and those have to be called Northern Orioles. There is nothing else to do. This is another reason for collecting, so we can check all the characters, measurements, and patterns (such as the pattern of the tail feathers which differs in the male). There are times when you must have the bird in hand.

Question: What are some of the characters of the Audubon's and Myrtle hybrid in the fall?

PHILLIPS: They are extremely difficult to distinguish in fall. I wouldn't try. I'd collect them and count the number of white patches on the tail. In Myrtles, the outer 2-3 rectrices have white patches, with the 4th dark. Audubon's has patches on 4 or even 5; usually it has a definite spot on the 4th, sometimes on the 5th. Again, you get gradations and they do cross, which is why they are one species. Here is a rather striking example of geographic variation. These are one species, but notice the difference between the Yellow Palm and Western Palm Warbler. They are quite a different color--one yellow, the other dull. These are all fall birds. You must always compare birds in the same plumage. You don't compare spring birds with fall birds. On the back, the Western Palm is distinctly browner and less greenish. One of the groups that is the horror of Eastern birders and out here is the Blackpoll and Bay-breasted Warblers. They're pretty much alike (in fall); the facial pattern is pretty much the same. Often in the Bay-breasted, you get some hint of the bay, especially if it is an adult. You never get that in the Blackpoll. On top of that, the yellow ones can be confused with other warblers. From these really dull Pine Warblers, you can see the pattern of the head is not dissimilar. There is frequently streaking just about the same on the side of the breast.

Question: Is there a size difference?

PHILLIPS: There might be in the hand, but I doubt you could use it in the field. Generally the Pine is a greener bird, but the thing that sets it off immediately is the unstreaked back. This means of course you've got to either collect the bird or get above it. I'm sorry I don't have a better collection with fall plumages to show you the full range of variation which would show a great deal more overlap.

Here is an obscure little bird--the superciliary is quite marked and there's a slight gray tinge above, which might tell you that it's a female Cerulean. The distinctive thing about the Chestnut-sided Warbler to look for, especially in the fall, is the contrast of a yellow crown with gray cheeks, solid gray sides of the head, and white eye ring. Don't look for the chestnut sides.

Question: Now, the juvenile plumage is a solid sort of chartreuse on the back?

PHILLIPS: I wouldn't be surprised. In general, after the juvenile, most of your Dendroica and a good many other warblers have two plumages a year. The basic fall, or winter, plumage is acquired by complete molt, usually in August. In the spring, prior to return, most warblers have the second prealternate, or prenuptial, molt and acquire the bright plumage seen in the field guides.

This is how the Yellow Warbler looks in the fall, not very yellow. It does not have very strong wing bars. It has few or no chestnut streaks. It does have an eye ring, and in this one, it does have the saving grace of some yellow in the tail, if the tail is spread wide enough. However, there are some Yellow Warblers, in fall in which that yellow is so reduced that you have to look very closely to see even a trace of yellow. These birds are very commonly confused.

Question: On confusing the Yellow Warbler with anything else, what would it most closely resemble?

PHILLIPS: I don't think it really comes very close to anything. Notice the pale eye ring and the facial expression, no contrast on the cheeks at all, solidly colored face with pale eye ring...that's not very common in fall Dendroica. Now you could get that in Vermivora: Nashville, Virginia's, and so forth. But the Nashville always shows a white belly and never has wing bars. You can usually work out at least a trace on Yellow Warblers. This bird here has a rather dull appearance with wing bars and no particular head markings, but it has a give-away--notice the white spots on the tail of this Magnolia are on the basal half of the tail. Any warbler in any plumage with that tail is a Magnolia, unless of course it's a hybrid or a freak. And right above, you have the yellowish rump to help out. So the tail pattern is very important.

Another thing...notice in Yellow-rumped, the tail spots cut off before the tip. In most of the other Dendroica, the white goes right out to the tip. This one has the very common pale superciliary and spot on the lower eyelid and is streaky underneath. It may be yellow or white and may be distinctly yellow on the rump, or not. It does have a definite pale side of the neck setting off the dark cheek--the best mark of a Cape May. The cheeks are dark, but not excessively dark like a Townsend's which is really strikingly marked.

Questioner: You have mentioned nothing about leg color in the Black-poll and Bay-breasted.

PHILLIPS: Bay-breasted is the darker legged of the two. This is generally considered to be a good mark, but I have heard that there is variation. These are 90-95% characters you use, but without forgetting everything else.

Question: I was wondering if you or anyone has noticed the difference in white between Audubon's and Myrtle in the field?

PHILLIPS: I have never seen it in the field--no. There is also racial variation within both the Myrtle and Audubon's.

Question: Are there fall warblers that just can't be told in the field?

PHILLIPS: If you know the field marks and study the birds carefully, probably you could identify 95%. The other 5% I would advocate collecting, if you have a collecting permit of course. One function of a serious ornithologist is to try to accurately summarize what is known about their particular branch of ornithology and make the information generally available. For this reason, anyone who works on state and regional books, as I do, has to try to sift out the facts and discard the probabilities. We must not take for granted what a bird looks like, without looking at it. There is a quarrel I've had for a long time with people who think a photographic record is all right. Well, if you had enough pictures, it might be almost as good as having a specimen, but two tail feathers will tell me more, probably, than all those photos--something concrete. The bird will get along fine without them, and it can remain alive and well. If you familiarize yourself with what are the critical characters of these groups, you will be able to save valuable scientific material even if you are completely opposed to killing the bird or have no permit to collect. Taxonomy to me is the summation of all our knowledge about birds. If you have not identified your animal correctly, all of your work is wrong.

PIPITS

PHILLIPS: Some pipits and Horned Larks are fairly conspicuous and easily identified I didn't even get out an adult Horned Lark because you all know it and wouldn't confuse it with a pipit. The Rocky Mountain race of the Water Pipit with its warm brown rufous underparts is one you wouldn't confuse. Generally this pipit shows more white in the tail. Ventrally, these other plumages of pipits and juvenile Horned Larks do not differ very much, dark in about the same areas. In addition, the Water Pipit varies a good deal seasonally. The young Horned Lark should never be mistaken because it has this conspicuous silver-spangled dorsum (upper parts with white dots). The Water Pipit, of course, is solidly dark and never has white on the upper parts. For this reason, someone will report to us having seen Sprague's Pipits in the summer here in Colorado. Sprague's Pipits do have a light color on the sides of the back. Notice that they are in the form of streaks, not spots. I tell Sprague's Pipits by the call note and habitat more than anything else.

Question: What are your chances of confusing a Horned Lark and pipits? Do they come through the lowlands?

PHILLIPS: Oh yes, there is a regular migration of Water Pipits, sometimes even into early June. If the mountains are heavily snow-covered, you'll have pipits down here. And then again they come through in September, October and early November. The first ones probably show up in early March.

Question: What is the difference in habitat of the two pipits?

PHILLIPS: Sprague's is a bird of open grassland, while the Water Pipit is found usually around water, in ditches or ponds, or above timberline in rocky country. You may get either one out in an irrigated field, although chances are that you've got a Water Pipit. In the fall and winter Water Pipits tend to be in flocks. Sprague's I have never seen in flocks; they're solitary in fall and winter in my experience.

Question: Is the Horned Lark at higher elevations a separate subspecies?

PHILLIPS: I don't think this has been worked out for sure. There is supposed to be a tundra race in Washington. I have never seen enough material from the mountains that I could really make a decision on that. Horned Larks wear very badly because they are always running through grass, and you have to have specimens taken at the right time of year if you want to see the color differences. Over the whole of North America, the Horned Lark is one of the most variable birds. One important difference your field guides don't tell you: the Horned Lark's tarsus is quite different, rounded behind not sharp. Also, in the Horned Lark, the outer tail feather is only partly white; in Sprague's and Water Pipits, it is very largely white. Then the bill of the Horned Lark is shorter, more conical, not as long and pointed. Sprague's has a decidedly longer hind claw than most Water Pipits, especially our alpine ones.

The matter of wear is something that is difficult to learn. As a general rule, wearing produces a darkening of the plumage. Compare this bird in April with this one taken in late June. Notice the light parts of the tertials are worn right off their sides. Light edges particularly will wear off and therefore you get a general darkening. Something in the melanin in feathers makes them wear longer. So feather wear, adult and juvenile plumages all have to be considered.

Editor's Note. While juvenile Horned Larks and the two pipits may be confused with each other, more typically Colorado observers mistake Savannah Sparrows for Sprague's Pipits. Some field guides suggest that Sprague's Pipits are very whitish on the breast. This is not the case. Sprague's have a decided yellowish/tan cast to the breast. The breast spots also tend to be in the shape of a wide necklace rather than having spots all over the breast and sides as often depicted. The Savannah Sparrow and the Sprague's Pipits use the same

habitats and have very similar behavior patterns such as their tendency to run along the ground and then make a short, low flight, quickly diving back into the grass. Check the bill shapes closely as well as the background color of the breast.

HUMMINGBIRDS

PHILLIPS: The next item is female hummingbirds, which are largely a matter of tail feathers. We divide females into two groups: those with a brown wash down the tail and those without. The Anna's Hummingbird is the only species we have in the collection which never has any rufous at all. If we had a nice series of Black-chinned, you would see a buffy wash on the sides of young birds. We do have Calliopes and a Broad-tailed which are not too much redder than a young Black-chinned. They are pretty dull birds. Whether a bird has reddish in the tail is not always easy to see. You can see in this Calliope, the rufous is just vestigial, hardly visible even with the bird in the hand. It does have a rufous wash in the crissum (the undertail coverts) and that is enough to tell you it's not a Black-chinned. The dull ones are Black-chinned, Ruby-throated, Anna's, and Costa's, the genus Archilochus and Calypte as currently recognized. The rufous ones are in Selasphorus, the Allen's, Rufous, and Broad-tailed in the U.S. Calliope is somewhat intermediate. It has very little rufous in the tail and the rufous in the sides is not very bright. It is a little smaller, so if you had a Calliope in comparison, you could pick it out. There is a common impression that Rufous Hummingbirds are brown-backed. This is true only of the male and not all males, so a hummingbird with a brown back is a male Rufous, but one with a green back may be a Rufous. It comes down to the tail feathers. Dates are also helpful in determining what hummingbird you have, particularly in Colorado or Arizona where we have no breeding Rufous. We don't expect them until July and those that do appear will be adult males with a great deal of rufous in the tail. If the tail is rufous, then it is Rufous or Allen's male. A hummingbird with rufous sides prior to early July is practically certain to be Broad-tailed. Are there any records of Calliope's breeding in Colorado? I don't think so. (Ed.-No!) Therefore, we don't expect Calliope's in June either. In Arizona, the Calliope tends to be a little later, coming in the middle of July. The first ones in are males, and a male Calliope well seen, is unmistakable because of the streaked appearance of the gorget.

Questioner: We do get males in June.

PHILLIPS: When? In early June they may be going north. I know they breed in the northern Rockies as do the Rufous. Allen's have never been found in Colorado yet, but anything can happen.

Question: How do you distinguish them because there have been feeder reports of Allen's, one for instance from Colorado Springs?

Phillips: The outer rectrix, central rectrix, and in the male, the next-to-central rectrix. Also, there is a difference in the

length of the bill, wing and tail. The outer tail feather is extremely spiky, like a pin, in Allen's and less so (a bit wider) in Rufous. The next-to-center tail feather in male Rufous has a notch. It's not just broader generally than Allen's, but it starts narrow at the tip as a notch and then becomes wide.

Question: Do you need the same samples for Black-chinned vs. Ruby-throated?

PHILLIPS: Black-chinned vs. Ruby-throated is very tough. You need to know the age and sex. Of course, male Ruby-throated can be easily distinguished from Broad-tailed by its rectrices, and the male Broad-tailed usually makes the noise that you recognize it by. But during the molt, you wouldn't hear him because, as I understand it, that sound is made by the outer primaries and they'd be dropped and renewed once a year. You could easily tell by the rectrices. The Ruby-throated and the Black-chinned have the central rectrices somewhat shorter than the ones around them, whereas the Broad-tailed, Rufous and Allen's have the central slightly longest.

Questioner: Can you see this in the field?

PHILLIPS: Yes, as long as you're sure the bird hadn't lost any rectrices (molting) or worn the tip off. You'd have to see it quite clearly.

Questioner: That doesn't help separate the Ruby-throated from the Black-chinned.

PHILLIPS: No, I've been struggling with that, trying to identify young birds. It's almost impossible. If you know the age and sex and have the fifth primary from the outside, you can. I wrote this up in Western Birds, showing the difference in immature males. The difficulty is in the technical literature. The Black-chinned is larger than the Ruby-throated, with a longer bill. This is fine in the U.S., but I have found a race of Black-chinned in Mexico which is smaller than the race of Black-chinned here. That is the fly in the ointment for a suspected Ruby-throated. The only thing to do is to collect it and preserve it immediately, so you can see the gonads and get the age. Generally speaking, the bill length will separate most of them. The bill length in a female Black-chinned is 19.5 mm or more, Ruby-throated is shorter, 17-19.5 mm. That is your best bet in the U.S.

Questioner: We have reports of Black-chinned from Sheridan. I think they're adult males.

PHILLIPS: Well, anything is possible, but I'd like to know some substantial evidence. I wish somebody would catch one in a net and send a couple of rectrices, outer and middle would be very helpful, and bill, wing and tail length. Bill length is customarily measured as the exposed culmen, from the tip to the point where the culmen enters the feathers. Wing length, from the bend of the wing to the tip

of the longest primary. We usually take the chord of the wing, without flattening it from its normal position, and the tail from the insertion of the two central rectrices to the tip of the longest rectrix.

The technical difference between Broad-tailed and Rufous female adults is not only in the width of the outer rectrices, but also Rufous normally have at least a trace of rufous on the edge of the central rectrix toward the base. Broad-tailed have the central pair of rectrices entirely green. The critical measurements are: Rufous females outer rectrix 2.8 or 3 mm to 4.2 mm wide. Broad-tailed will be 4.5 or more and Allen's not more than 2.8, usually less.

Question: Do adult females always have spots on the throat?

PHILLIPS: Here is a female with lots of red on the throat. Females and immatures look very much alike. In general, immature females will have a plain throat, with no spots at all. An immature male would have speckled throat in any of the SW hummingbirds. As time goes on, the immature male is going to get more and more color on the throat. You might have to open the bird up or know the rectrix pattern. I don't know if Calliope has really been worked out. There was an excellent paper in the 1972 Condor (25-32) on age and sex determination in Rufous and Allen's by Gary Stiles, if you want further details.

Question: The difference between immature male and adult females would be streaking on the throat?

PHILLIPS: I'm not sure you can tell. The central rectrices would be good in Rufous, but a study comparable to Stiles' hasn't been done on the Broad-tailed. You have two larger hummingbirds in Arizona, Rivoli's and Blue-throated; no problem with males. The essential characters of female Blue-throated are a very smooth gray under-surface, without any marbling or mottling, contrasting with a well-marked white malar stripe, and conspicuous white tail corners which cover nearly half of the outer feather. The female Rivoli's, by contrast, has a mottled instead of smooth gray underside. The malar stripe is not very white and not very prominent. The tips of the outer rectrices are gray, not white. Rivoli's is the more northern; Blue-throated seldom gets much beyond the borders of Mexico. Rivoli's is the one to be expected in Colorado.

Questioner: Before you leave the hummingbirds, the guide notes the Rivoli's female is largely green and the Blue-throated largely black on the tail.

PHILLIPS: I've never paid any attention to that. It's good to check but I haven't done so. Your guide does mention and illustrate properly the white vs. gray tail corners.

Questioner: He doesn't illustrate the male with much white at all.

PHILLIPS: That is a mistake because both sexes have the same amount of white. Well, you can't say this book isn't useful. It is, if you use it properly. I should mention Lucifer's Hummingbird because it is very distinctive. Since it has turned up in Arizona a couple of times, it might turn up here and you'll probably get reports even if it doesn't. Lucifer's has a rufous sort of appearance underneath. The rufous wash extends across the chest and meets in the middle. The white stripe back of the eye is not an isolated stripe but continues back down to join the throat, so that, with the distinctively curved bill, you can recognize those birds. That white is in females. You shouldn't need it for the male which is quite distinctive.

TANAGERS

PHILLIPS: I have here the Piranga tanagers. There are four species. The Western is highly variable in color. Young females can be very untanager-like, brown, gray, and white. The young males are quite different in color. In fall it is easy to tell males from young females, but adult females can be very similar to immature males. Adult males need no introduction at all, except to note that occasionally you get a somewhat reminiscent pattern in the Summer Tanager. If we had a large series of first year Summer males, we might get a few looking very much like a Western. On the back, of course, they are entirely different. The Westerns get the black back which other tanagers never have. The Summer Tanager has the most complicated series of plumages and can look like almost anything. Incidentally, the Summer doesn't have to be redder and less hepatic colored than the Hepatic, as you can see in these two males of each. In the field, you certainly wouldn't see much difference in the red, although the back is grayer in the Hepatic. General coloration is quite similar. There is a gray mandible. The books tell you it's easy to tell the Hepatic from the Summer because of the black bill. What they don't tell you is that the young Summer has a dark bill into the fall; I'm not sure for how long. So this nice pale bill that you identify breeding Summer Tanager by is not very useful in the fall. If it's light, it's a Summer Tanager; if it is dark, it may also be a Summer Tanager. Summer Tanagers are of interest here because it is not a common bird and cooperi (the western race) is told from the eastern (they both reach Colorado) by the paler color, longer wing and tail, and a distinctly larger bill (when you compare them side by side). The more birds you have, the more easily you can see the differences because individual variation confuses the picture at first. When you have 4-5 or more of each sex and age group, you can see the tonalities that run through them all. The Scarlet Tanager you can recognize by the greenish olive of the upper surface of the females. Subtle colors are fine when you have the bird in hand, but when the sun is playing tricks and birds are hopping around up in a tree, that's not quite so easy. The Scarlet has the smallest bill except for the Western. It's more of a clear green-yellow tone (Scarlet) underneath. Now the young male Scarlet is easy to tell because it has black wing coverts, a black patch up here at the shoulder, that sets him off immediately from any Summer, Hepatic, or Western Tanager. It's often thought Western is easily told from Scarlet by wing bars; Scarlets don't have wing bars.

This is not altogether correct. Young Scarlets frequently do have a trace of wing bars. They're not as conspicuous, but they are there. They can have small wing bars and still be a Scarlet Tanager.

Question: Going back to your description of the belly color, I thought you were saying the Scarlet had a clearer yellow than Summer?

PHILLIPS: Yes, the belly of Summer has a more ochre/buff tone; Hepatic is a little more olive. The Hepatic female, particularly the race we get up here in the States, is quite gray on the flanks as compared to the more greenish flanks of the other, but this is a racial character. Remember other places have other races, and they won't look the same.

Question: What about the backs being more green or olive on the Scarlet?

PHILLIPS: They are more greenish olive vs. grayer. The description of colors in words is a very difficult matter. The color guides are not altogether satisfactory because nature presents so many variations in color.

Question: What about the gray Western Tanagers they have been describing in the East?

PHILLIPS: They are simply immature females. The field guides don't describe them, and most people don't go past the field guides. Young birds are generally grayer. If the birds were from around New York City I'd say it was probably just soot.

Question: The female Hepatic bill color, is it variable?

PHILLIPS: No, the black bill is a constant character; the pale bill of the Summer is not, except for adults in the breeding season.

SEASONAL REPORT--SPRING 1981 (MARCH 1 - MAY 31)

by Frank Justice

1917 S. Quitman Street, Denver, CO 80219

This report in scope and content attempts to follow criteria espoused by Robert Andrews in the Spring 1980 report, Volume 15, Number 1. In general it focuses on extralimital rarities and minimizes observations of common species.

This report notes some latilong changes, but does not include changes in Latilong block 3 (Steamboat Springs) and block 13 (Limon) reported by Charles Chase and Frank and Jan Justice, respectively in CFO Journal Volume 15, Number 3.

Part I

The following table summarizes new extreme arrival and departure dates. References for previous extreme and average dates are Holt (1980) Migration Calendar of Birds of the plains of Colorado--Denver area--North and East, Halsey (1981) New Extreme Dates for Lane and Holt's book, CFO Journal Volume 15, Number 3, and Davis (1969) Birds in Western Colorado.

| Species and County | Date of Observation | Previous Extreme Date | Average Date |
|-----------------------------------|---------------------|-----------------------|--------------|
| <u>Arrivals</u> | | | |
| Double-crested Cormorant (Denver) | 1 March | 11 March | 29 March |
| Barn Swallow (Jefferson) | 29 March | 30 March | 10 April |
| Cliff Swallow (Douglas) | 23 March | 16 April | 13 April |
| Warbling Vireo (Lincoln) | 25 April | 3 May | 10 May |
| Virginia's Warbler (El Paso) | 21 April | 24 April | 29 April |
| <u>Departures</u> | | | |
| Herring Gull (Jefferson) | 19 May | 11 May | 26 April |
| Swamp Sparrow (Jefferson) | 23 May | 19 May | 8 May |

Part II

This table summarizes the observations of a number of species which are of interest but for which it is not necessary to distinguish among individual observations because the pattern of occurrence is sufficiently well established and the total number of observations in the state is fairly large.

| Species | Total Birds | Dates | County or Location |
|-------------------|-------------|---------------|--------------------|
| Green Heron | 6 | 25 Apr-30 May | E. Colorado |
| Little Blue Heron | 1 | 3 Apr | Boulder |

| Species | Total Birds | Dates | County or Location |
|------------------------------|----------------|----------------|-----------------------|
| Cattle Egret | 14 | 4 Apr-30 May | E. Colorado |
| Great Egret | 2 | 26 Apr-16 May | Boulder |
| American Bittern | 9 | 18 Apr-31 May | E. Colorado |
| Ross' Goose | 6 | 5 Mar | Delta |
| White-fronted Goose | 2 | 23-25 Mar | Boulder |
| Greater Scaup | 3 | 14 Mar-4 Apr | Bldr., Doug., Pueb. |
| Broad-winged Hawk | 1 | 12, 18, 25 Apr | Jefferson |
| Peregrine Falcon | 2 | 14 Mar-14 May | Baca, Boulder |
| Whimbrel | 2 | 13, 15 May | Doug., S.E. Colo |
| Red Knot | 6 | 9 May | Arapahoe |
| Black-necked Stilt | 6 | 16, 18 May | Bldr., Delta |
| Thayer's Gull | 2 | 21 Mar | Denver |
| Least Tern | 3 | 23 May | S.E. Colorado |
| Cassin's Kingbird | 10 | 8-30 May | E&S.E. Colo, Jeff. |
| Great Crested Flycatcher | 1 | 20 May | N.E. Colorado |
| Hammond's Flycatcher | 1 | 24 May | Boulder |
| Bell's Vireo | 17 | 19, 20 May | N.E. Colorado |
| Philadelphia Vireo | 2 | 16, 17 May | Denver |
| Black-and-White Warbler | 4 | 4 Apr-20 May | S.E. & N.E. Colo |
| Worm-eating Warbler | 3 | 29 Apr-19 May | Bldr., Denver |
| Golden-winged Warbler | 1 | 16 May | Boulder |
| Tennessee Warbler | 7 | 10-25 May | El Paso, N.E. Colo |
| Black-throated Gray Warbler | 6 | 24 May | Pueblo |
| Black-throated Green Warbler | 1 | 21 May | N.E. Colorado |
| Chestnut-sided Warbler | 3 | 21-25 May | Bldr., N.E. Colo |
| Blackpoll Warbler | 1 | 16 May | El Paso |
| Ovenbird | 9 | 1-20 May | E. Colorado |
| Northern Waterthrush | 20 | 26 Apr-21 May | E. Colorado |
| Bobolink | 13 | 2-21 May | E. Colorado |
| Rusty Blackbird | 11 | 15 Mar-16 May | El Paso, Jeff. |
| Rose-breasted Grosbeak | 30 | 30 Apr-21 May | E. Colorado |
| Rose-breasted Grosbeak | 1 | 23 May | Grand |
| Indigo Bunting | 24 | 2-30 May | E. Colorado |
| Purple Finch | 3 | 21 Mar | Boulder |
| Grasshopper Sparrow | 16 | 20-31 May | E. Colorado |
| Rufous-crowned Sparrow | 3 | 23-25 May | S.E. Colorado |
| Cassin's Sparrow | 26 | 20-25 May | N.E. & S.E. Colo |
| White-throated Sparrow | 3 | 25 Mar-16 May | El Paso |
| Swamp Sparrow | 3 | 8 Mar-23 May | Jeff., Pueblo |

Part III

The following observations are considered to be notable enough that they warrant being discussed individually. Several of them are being reviewed by the C.F.O. Records Committee (*).

Red-necked Grebe - 1 at Lake Granby, Grand Co., 31 May (DJ). This is an infrequently reported spring migrant.

Western Grebe (Light phase) - 2 at Chatfield Reservoir, Denver 18 April (HK) and 2 at Pueblo 26 April (RB). This is the first time ob-

servers have reported "light phase" Western Grebes in Colorado. Since the A.O.U. may recognize them as a separate species, observers should distinguish and report them.

European Wigeon - 1 at Broadmoor, El Paso Co. 18 March (MC) and 1 at Monte Vista N.W.R., Rio Grande Co. (SW). These are apparent first observations of the species in the Pueblo and Monte Vista Latilong blocks.

Barrow's Goldeneye - 2 at Sweitzer Lake, Delta Co. 5 March (MJ). This may be the first record for the Delta Latilong.

*Black-bellied Whistling Duck - 1 near Colorado River at Silt, Garfield Co. 28 April (RP).

*Common Gallinule - 1 at Ryan Gulch Lake near Loveland, Larimer Co. 30 April (DL).

White-rumped Sandpiper - 1 at Pueblo 31 May (DG). This species is infrequently reported.

Hudsonian Godwit - 1 at Dye Reservoir, Otero Co. 13 May (JR). Although there are about 10 Colorado records, this would be the first for the Las Animas Latilong.

*Mew Gull - 1 at Union Reservoir, Longmont 28 April (MM,TF,MH). Possible second Colorado record.

Caspian Tern - 2 at Chatfield Reservoir, Denver, 15 May (DJ). About the eighth Colorado record and the second consecutive year reported at Chatfield.

Boreal Owl - continues to be observed in northern Colorado mountains and the first reported Colorado nesting attempt was observed near Cameron Pass (DP,RR).

Red-headed Woodpecker - 1 at State Bridge, Eagle Co. and 1 at Radium, Grand Co. 26-28 May (DJ). Unusual western Colorado record and a first observation in the Eagle Latilong.

Vermilion Flycatcher - pair and young north of Akron, Washington Co. Established first Colorado nesting record before storm killed young (HD).

Bewicks Wren - 1 at Boulder 8 April (MF).

Gray-cheeked Thrush - 1 at Muir Springs, Morgan Co. 10 May (DJW) and 1 at Big Sandy Creek, south of River Bend, Lincoln Co. 10 May (FJJ). These would be the first observations in the Sterling and Limon Latilongs.

*White-eyed Vireo - 1 at Lakewood, Jefferson Co. 26 April (ME). Possibly a first record in the Denver Latilong.

Golden-winged Warbler - 1 at Lyons, Boulder Co. 16 May (MF).

Blue-winged Warbler - 1 at Boulder, 26 May (OW).

Cape May Warbler - 1 at Muir Springs, Morgan Co. 2 May (JW). Possibly a first record for the Sterling Latilong.

Blackburnian Warbler - 2 at Colorado Springs, El Paso Co. 16 May (AAS).

Grace's Warbler - 2 at Pueblo, 24 May (RB) and 6 at Rye, Pueblo Co. 16 May (DG,DS). The observation at Rye of this infrequently reported species in eastern Colorado is possibly a first in Trinidad Latilong.

Hooded Warbler - 1 at Boulder 22,24 May (BW).

Eastern Meadowlark - 1 below the Two Buttes Dam, Baca Co. 14 May (JR) and 1 north of Limon, Lincoln Co. 15 April (FJJ). These observations represent additions to the Springfield and Limon Latilongs.

Scott's Oriole - 4 or 5 near Pleasantview, Montezuma Co. 28 April (CB,JC,RF,WS). Two or three pairs exhibited nesting behavior which may have produced a second Colorado nesting record. This is also a possible first record for the Cortez Latilong.

Common Grackle - 4 pairs at Eagle, 2 May (JM). This is an apparent first record for the species in the Eagle Latilong.

*Sharp-tailed Sparrow - 1 at Walden, Jackson Co. 16 May (HH). This observation of a rare accidental would represent an addition to the Steamboat Springs Latilong.

Black-throated Sparrow - 1 at Chatfield Reservoir, Denver 2 May (HK,JJ,m.ob.). Reported infrequently in eastern Colorado.

Sage Sparrow - 2 in El Paso Co. 27 March (RB).

Initialed observers and organizations and contributors to Parts I and II

Richard Bunn (RB), Claire Button (CB), James Cleaves (JC), Martha Curry (MC), Helen Downing (HD), Margaret Elliott (ME), Mike Figgs (MF), Timms Fowler (TF), Ron French (RF), Dave Griffiths (DG), Mark Holmgren (MH), Harold Holt (HH), Mark Janos (MJ), Dave Jasper (DJ), Frank and Jan Justice (FJJ), Hugh Kingery (HK), Dave Leatherman (DL), Jack Merchant (JM), Mike Middleton (MM), Dave Palmer (DP), Ruth Parkison (RP), Jack Reddall (JR), Ron Ryder (RR), William Sharp (WS), Dave Silverman (DS), Doug and Judy Ward (DJW), Bruce Webb (BW), O. Williams (OW), S. Woerthele (SW), many observers (m.ob.).

Aiken Audubon Society (AAS), Boulder Bird Club, Colorado Field Ornithologists, Denver Field Ornithologists, Foothills Audubon Club, Foothills Audubon Statistical Area.

Robert Andrews, Mr. and Mrs. Bruce Dines, Drew Grainger, Larry Halsey, Kathy Hawkins, Jim Holitza, Bob Jickling, D. Johnson, Dieter Kamm, Stephen Kennedy, Duane Nelson, Joe Rigli, Robert Spencer, Mildred Synder, Tom Van Zandt, Jim and Rosie Watts, Dorothy Williams.

A PEREGRINE AS PREY IN A GOLDEN EAGLE EYRIE

by Thomas E. VanZandt,

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The Golden Eagle territory in lower Lefthand Canyon is one of the longest and best observed in Colorado (Jollie, 1943; D'Ostilio, 1954). I have been keeping records on it since 1974. Since then, the pair has nested on the Lefthand Palisades every year except 1977, when they probably used one of the other 10 or so nests in the territory. In 1974, 1975, 1976, and 1978 they used a very large old nest, and in 1979 they used another old nest. But in 1980 they built a new nest, and in 1981 they built another new nest only 15 feet from the top of the cliff. None of the nests were visible from the cliff until 1981. Then on 14 March, Larry Halsey and I discovered that by lying on the top and extending our heads out about a foot, we could look directly down into the eyrie. This enabled us to take a series of photographs, from 14 March, during incubation of three eggs, until 17 June, only four days before the two young fledged (only two of the eggs hatched).

The prey in this nest consisted entirely of prairie dogs,* except that on 25 April, we also noticed the carcasses of two birds, one large and black and the other about the size of a Rock Dove and slate blue. When we saw the developed slides several months later we identified the larger bird as a Turkey, which are regularly seen in the Lefthand-St. Vrain area. However, the smaller bird was not a Rock Dove. Although the head and feet were out of sight, a careful study of field guides by Ridi VanZandt and I left only one possibility--an adult Peregrine! Our identification was confirmed by Dr. Greg Hayes of the United Peregrine Foundation.

Since there are only about a dozen Peregrines resident in Colorado, the loss of even one is serious. Unfortunately, by the time the identification was made it was too late to search for the legs of the Peregrine to see if it was banded, so that its origin could be established.

Since a Peregrine can fly circles around a Golden Eagle, it is interesting to speculate on how it might have been captured. Perhaps it was on the ground injured or with prey. But Dr. Hayes suggested another possibility. He has observed that when a Prairie Falcon defends its nest by stooping at a Golden Eagle, the Eagle sometimes turns over just before the strike and defends itself with its talons. Perhaps the Peregrine miscalculated and got nailed. The major problem with this hypothesis is that there is no known Peregrine nest within the feeding range of the Eagle eyrie.

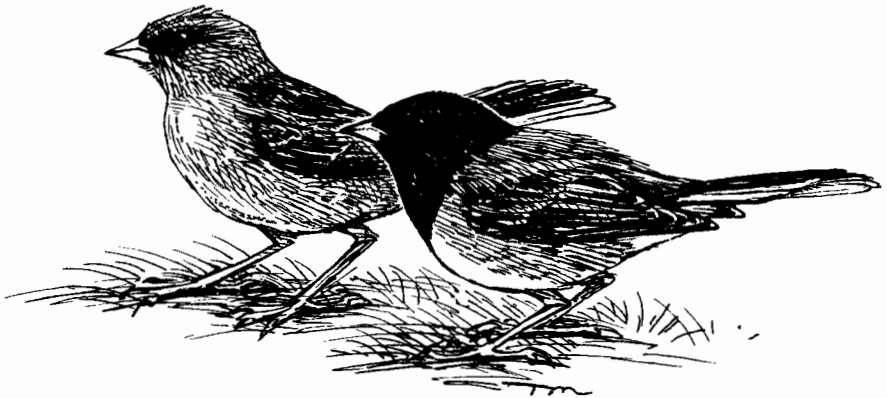
The location of the 1981 nest so near the top of the cliff gave us a great opportunity to make some unique and exciting observations,

* Other eyries in the foothills feed mostly on cottontails, with prairie dogs amounting to only 8% by number (D'Ostilio, 1954).

but it put the eaglets in jeopardy from irresponsible persons. So we are happy to report that in 1982 the pair is using the large old nest again, which is protected by a large overhang.

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DARK EYED JUNCOS. Sketch by Tim Manolis of Boulder

OCCURRENCE OF SAGE GROUSE ABOVE TREELINE

By Richard W. Hoffman and Brian S. Cade

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Wildlife Research Center

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It has long been recognized that Sage Grouse (Centrocercus urophasianus) are dependent upon sagebrush (Artemisia spp.)-grassland dominated communities. Observations of this species outside of the sagebrush type are rare and infrequently reported. Rogers (1964) listed the elevational range of Sage Grouse in Colorado as between 1,433 and 2,744 m. Recent studies in Nevada (Savage 1969, Oakleaf 1971) documented that Sage Grouse heavily use mountain meadows (to 3,049 m) in July and August. In the appendix of his original report, Cooke (1900:203) stated that Mr. Carter found Sage Grouse breeding near Dillon, Colorado at about 2,744 m, had collected them at Breckenridge (2,939 m) and seen them crossing the "main range" (not identified) at 4,268 m. To our knowledge, this is the only recorded sighting of Sage Grouse above treeline in Colorado.

On 4 August 1981, we flushed 3 male Sage Grouse from an alpine site at an elevation of 3,567 m along Elliot Ridge, 44 km south of Kremmling, Colorado (NW1/4, NW1/4, Section 18, T2S, R80W). Size of the birds observed indicated that they were adults and/or yearlings. We were uncertain as to their activity when observed (1130 MDST), but accumulated droppings suggested they were resting among the cover of the rocks. All flushed simultaneously upon our approach and flew northeast towards Green Mountain Reservoir; the direction of the nearest occupied Sage Grouse habitat (10 km).

The area where the birds were flushed was a moist Carex-Geum meadow with an abundance of rock (>50% of the entire cover) and numerous low-growing forbs. A late-lying snowfield was 50 m south of the observation site; the site itself being part of this snowfield that had recently melted. Willow (Salix spp.) was the nearest shrub, but did not occur within 200 m of the sighting. The area was characteristic of White-tailed Ptarmigan (Lagopus leucurus) brood habitat (Braun 1971) and we had just previously encountered an adult female ptarmigan with 3 chicks only 100 m away.

Areas between the alpine location and nearest sagebrush habitat consisted of spruce-fir and aspen (Populus tremuloides) dominated communities. No corridor of potentially suitable habitat existed for Sage Grouse to reach Elliot Ridge without traversing a minimum of 8 km of coniferous and aspen forests.

The birds were undoubtedly transients as no subsequent sightings were made. Since Sage Grouse feed primarily on forbs during the summer, they can survive during this period without sagebrush, thus allowing them to cross mountain ranges separating occupied areas.

This is a contribution from Colorado Division of Wildlife, Federal Aid in Wildlife Restoration Project W-37-R.

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C.F.O. FIELD TRIPS AND EVENTS

Saturday - Sunday, March 20 - 21. Monte Vista National Wildlife Refuge. Leader Jon Kauffeld, Refuge Manager (W) 589-6074. Meet at Refuge Headquarters at 3 p.m. on Saturday (6 mi S of Monte Vista along Colo. 15). Afternoon of waterfowl and cranes. Sunday morning observe Whooping and Sandhill Cranes from 8-10. Call Betsy Webb (H) 449-4785 for information on overnight accommodations and to make a trip reservation. This is primarily an auto tour.

Saturday - Sunday, April 17 - 18. Carrizo Canyon and Comanche National Grassland, Baca County. Leader Jenny Slater, District Wildlife Manager, DOW (W) 523-4698. Tour of Lesser Prairie Chickens on booming grounds on Sunday morning. Meet at rest stop just south of Springfield at 4 a.m. (at junction of U.S. 287 and Colo. 160). Optional Saturday birding at Carrizo Canyon. For further information and trip reservations call Betsy Webb (H) 449-4785.

Saturday, May 22. Boulder's Sawhill Ponds (half-day trip). Leader Freeman Hall (H) 444-1453. "Peak of spring migrants" birding - 60 species seen this time last year. Meet at Skagg's at intersection of 28th Street and Longmont Diagonal at 7 a.m.

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