THE ORIOLE

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EDITOR

Bill P. Lovejoy, Biology Department, Georgia Southern College, Statesboro, Georgia 30460

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RARE SHOREBIRD VISITORS TO THE UPPER COASTAL PLAIN

Thomas K. Patterson

The Annotated Checklist of Georgia Birds (Denton et al. 1977) lists several shorebird species as rarely occurring in the interior of the state. In the fall of 1980, the following species were recorded in Laurens County: Mountain Plover (Charadrius montanus), Lesser Golden Plover (Pluvialis dominica), Black-bellied Plover (Pluvialis squatarola), Ruddy Turnstone (Arenaria interpres), Wilson's Phalarope (Steganopus tricolor), Dunlin (Calidris alpina), and Buff-breasted Sandpiper (Tryngites subruficollis).

The Mountain Plover, the Black-bellied Plover, and the Ruddy Turnstone represent the first records for the county; Dunlin and Buff-breasted Sandpipers have been noted once previously, and the Lesser Golden Plover had not been recorded in fall migration. Considering the status of these species in the interior, it seems most unusual all would appear in the same season.

The summer of 1980 brought record heat and drought to the midsouth and southeast. Jackson's Pasture, a 200 ha rolling meadow in northeast Laurens County, the location of the sightings, was not spared by the extreme conditions. Wet weather ponds disappeared early; and, by late September, the two natural ponds in the pasture were reduced to small puddles of water. The pasture grasses, green and lush in the normally dry summers, were brown and barren from the conditions and from the grazing of the cattle.

Shorebird migration began rather early with Lesser Yellowlegs (Tringa flavipes), Solitary Sandpipers (Tringa solitaria), Least Sandpipers (Calidris minutilla), and Pectoral Sandpipers (Calidris melanotos) appearing on 16 July; and with Semipalmated Sandpipers (Calidris pusilla) and Spotted Sandpipers (Actitis macularia) present on 20 July. Small numbers of these common transients were consistently noted through the late summer and early fall. By 16 November, only the Greater Yellowlegs (Tringa melanoleuca), the Lesser Yellowlegs, and Least Sandpipers were present. Stilt Sandpipers (Micropalama himantopus), usually scarce in the interior, were noted in groups of two or three from 2 August through 12 October.

Dates and some details of the records of the rare species follow.

Lesser Golden Plover. A very early single bird was seen near one of the natural ponds on several occasions between 16 August and 6 September. The plumage was transitional. All field marks which distinguish the species from the Black-bellied Plover were carefully noted. Seven of the species were observed on 9, 10 November. These birds, feeding near Killdeer (Charadrius vociferus) in the open pasture, were in basic definitive plumage.

Black-bellied Plover. Two birds were noted at the water's edge on 1 November; and a single bird was seen in the open pasture with other species on 8-10 November. The white tail feathers and the black axillars of the three birds, which were in basic definitive plumage, were noted on each occasion.

Ruddy Turnstone. A single Ruddy Turnstone was seen with the early Lesser Golden Plover on 6 September. Another individual, or possibly the same bird, was recorded at a small pond some 5 km from the pasture on 8 September.

Wilson's Phalarope. A very late individual was observed with a number of Lesser Yellowlegs on 10, 12 October. The smaller size, the pure white neck and underparts, and the light gray back distinguished the species from the yellowlegs. In recent seasons, most especially in fall, the Wilson's Phalarope has been regularly recorded in the area.

Dunlin. This species was recorded on several occasions between 25 October and 10 November, the largest number being nine birds at a pasture pond on 1 November. On 10 November, three birds were seen flying and feeding with Killdeer in the open pasture area some 500 m from the nearest water. The birds appeared to probe into the hard ground. I had previously noted Pectoral Sandpipers feeding in the pasture in early September, and had seen Least Sandpipers leave the pond with Killdeer to feed in the pasture for short intervals. Since I had never before observed these species away from the pond's edges, I speculated on the seemingly special attraction the birds had found in the pasture this season.

Buff-breasted Sandpiper. An unusual number of 18 birds was present near water on 6-8 September. The group was in company with 25 Pectoral Sandpipers. Photographs of the group were made on 7 September, using a fixed 400 mm lens and a 2X converter. On two occasions as the birds were approached, all departed the watering area, alighting together in the pasture some 200 m distant. However, after a few minutes, the Pectoral Sandpipers returned as a group, followed seconds later by the flock of Buff-breasted Sandpipers.

I had previously recorded and photographed an individual Buffbreasted Sandpiper in spring (Patterson 1979). The notable difference in the appearance of the fall birds was the leg color. I had noted the vivid orange-yellow legs of the spring bird. The legs of the fall birds were of the same hue, but of a dull, lackluster appearance.

Mountain Plover. In midafternoon of 8 November, while scanning a pasture hillside in which hundreds of Killdeer were feeding, I noted a

single plover-like bird which had no "collar." Through binoculars from 250 m, I saw three other birds of the same appearance a short distance from the first. A Black-bellied Plover was feeding only 3 or 4 m from this second group.

With binoculars, a 20-45X telescope, and a field guide, I entered the pasture, circling the birds until the bright sun was directly over my right shoulder, then approached the birds directly. At about 60 m distant, the Killdeer and the other species crouched, as birds often do just prior to flight. From this distance, I observed the birds through the scope for several minutes, checking the field guide for alternatives in identification. The four birds appeared to be Killdeer size, or slightly smaller, and notably smaller than the Black-bellied Plover. The mantle - there was no flecking or mottling — was very much like that of the Killdeer. The dark bill was that of a plover. The breast was a dusky beige, fading into the white belly. Although the birds were in winter plumage, the most striking feature was the white about the face. There was a white eyeline which disappeared into the white forehead above the base of the bill. The throat was white, joining the white lower cheek. A fairly large, light brow evepatch, which faded into the mantle, interrupted the pattern of white. I concluded that the birds were Mountain Plovers.

I proceeded toward the birds to observe their flight. After only a few steps, the nearby Killdeer took flight, and the Mountain Plover joined them. Unfortunately, the bird flew directly away from me so that I could see little of the flight markings and underwing color. The birds showed little of the white and none of the russett that was shown by the Killdeer.

During the following two days, I searched the pasture among the estimated 2,000 Killdeer, hoping to collect a specimen of the Mountain Plover. Unfortunately, the four birds were not seen again.

The Mountain Plover is on Georgia's hypothetical list (Denton et al. 1977) with two sight records from Sapelo Island. A further investigation for records of the species in adjacent states reveals that Florida has four records, each supported by a specimen (Stevenson 1975), and Alabama has one record, also supported by a specimen (Imhof 1976). Tennessee has not recorded the species (Ken Dubke, pers. comm.), nor has North or South Carolina (Harry LeGrand, pers. comm.).

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1409 Edgewood Drive, Dublin, Georgia 31021.

GOLDFINCHES FEEDING ON FILAMENTOUS ALGAE

Lawrence Kilham

A remarkable feeding habit of American Goldfinches (Carduelis tristis), first reported by DiGioia (1974) in Georgia, is that of feeding on filamentous algae (Spirogyra). I report other observations, made in Bethesda, Maryland in March 1953, and later in months from June to September, in Lyme, New Hampshire, between 1967 and 1980, indicating that the habit is, apparently, both common and widespread.

Observations made at a beaver pond in 1967 are representative. When I first came to the pond on 17 August I noted numbers of goldfinches flying back and forth from the middle of it. Why should they be alighting on sticks and logs surrounded by open water? Centering attention on a female perched on a snag, I saw her swing down repeatedly to seize strands of algae 5-8 cm long, which she ate like spaghetti. A male came and did the same. Neither bird made the motions of lifting the head up and down that birds make when drinking. On another day a female flew well out from shore, bobbed her head as if looking for something, then moved to a log surrounded by water. Here she ate seventeen strands of Spirogyra 7-10 cm long. On 27 August a female fed for over 5 minutes seizing strands, one after another, 25 cm in length, some of which caught on her breast and one around her head.

Why, one may ask, should a small land bird, that is primarily a seedeater (Bent 1968) have adopted a water plant as part of its regular diet? It is of interest here that Beal (in Bent) stated of a western race of goldfinch (C.t. salicamans) that "one marked peculiarity of the goldfinches is their bibulous habits. They seem always in need of water, owing to the habit of eating dry seeds. The writer has seen more goldfinches drinking in one day than he has seen of all other species in his whole life." The same need of water is also stressed for the Lesser Goldfinch (C. psaltria). It is conceivable that coming to water frequently may have been enough to initiate the habit of consuming filamentous algae. The value of the habit would seem to be that algae are highly nutritive. Avery (1980), in describing the way Sharp-tailed Munias (Lonchura striata) gear their breeding seasons to a diet of rice and algae in Malaysia, observed that they eat "Spirogyra as a source of protein to enable them to become physiologically ready for breeding much as other tropical bird species eat insects." It would be interesting to know how much of a goldfinch's diet consists of algae, especially when raising young.

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Department of Microbiology, Dartmouth Medical School, Hanover, New Hampshire 03755.

NATURALLY OCCURRING POPULATION OF A SEA ISLAND BY WILD TURKEYS

G. W. Sciple and Gerry Newman

We have observed an interesting series of occurrences relating to the population of Little Cumberland Island by Wild Turkeys (Meleagris gallopavo silvestris). These observations were carried out over a period of almost two decades. The lengthy period over which the observations were made, combined with the unusual geographical and ecological circumstances existing on the island, suggest that the data collected may be of value to others. These data are presented here in narrative form.

Little Cumberland is one of the sea islands which lie along the Georgia coast between the open Atlantic on the east, and estuaries, marsh, and mainland on the west. St. Andrew's Sound, about three miles wide, lies north of Little Cumberland and separates it from Jekyll Island. To the south, Little Cumberland is separated from Big Cumberland by a complex series of saline creeks and Spartina alterniflora marsh. At their closest point, Big and Little Cumberland are separated from each other by several hundred feet of tidal salt water and saline marsh. At their furthest point, they are divided by a mile or so of water and marsh. The mainland lies several miles to the west of both islands.

Little Cumberland probably averages about two thousand acres in extent. There are constant accretions to and subtractions from the unconsolidated sediments which make up the island. These additions and subtractions are the result of wave action, strong tidal currents, and winds. Roughly one half of the island is high land, above the reach of the usual five to eight foot tides. The other half is saline marsh, covered by tidal waters for varying periods depending upon the elevation of the marsh and the height of the tide.

Except for the beaches, the island is heavily vegetated. Live oaks and water oaks are the dominant trees. A few magnolia and hickory trees are seen in the geologically older and more stable parts of the island. Cedar trees are present in a fringing band just above the usual high tide line where marsh and high land join. Small bay trees are irregularly distributed. One small area of mature pine forest is present. The understory vegetation is heavy, consisting mostly of palmetto. Huckleberry bushes are frequently seen. There are numerous narrow, linear, closed sloughs which are fed by rainwater. Their surfaces are often partly or mostly covered by duckweed and they often have a few willow trees emerging from them. Tall grasses and rushes line the margins of many of these sloughs.

A band of grassy prairie several hundred feet wide lies parallel to the beach and behind the building sand dunes at the upper edge of the beach. This prairie is dotted with sea myrtle bushes which grow to about ten feet in height.

Little Cumberland is surrounded on the east, north, and west by

open water. Winds are frequent and waves constantly break on the beaches. Fine salt spray is carried in the air to all parts of the island, but the heaviest concentrations settle on the plants of the prairie described above. After a heavy easterly wind, the grasses and other plants can actually have enough salt deposited on their surfaces to have a glistening appearance and to be salty to the taste.

Little Cumberland is a privately owned wildlife refuge. Casual human access and use is discouraged. Hunting is not allowed and is carefully guarded against. No turkey is known to have been killed on the island by humans during the period under consideration. Other potential predators on turkeys are known to be present. Wild hogs exist in large numbers and are voracious. The raccoon population is quite high and extreme intraspecific food competition amongst raccoons has been observed. Hawk predation on turkey poults is possible, though not observed. Cooper's Hawks and Peregrine Falcons are known to be present. A single Goshawk was seen in 1977. Alligators are seen in large numbers and they have been observed preying upon Clapper Rails. Large snakes of many species are common.

There is no known instance of either wild or domestic turkeys having been introduced either deliberately or accidentally on Little Cumberland.

Little Cumberland was not inhabited routinely by humans so far as we have been able to determine, between the abandonment of the lighthouse in the early 1900's and the settlement of one of us (Newman) there in 1962. A coast-watch detachment of a few military personnel was present at the time of World War II. We have no knowledge of turkey presence on Little Cumberland Island prior to 1962. Numerous observers besides ourselves were frequently present on Little Cumberland from 1964 onward. Several of these observers were engaged in biological field studies where observations were being made at dawn, dusk, and nighttime hours as well as during daylight hours. There were, then, from 1964 until the present, several trained observers working at Little Cumberland Island from whom reports of turkey sightings were available. Further, these observers were active not just during usual daylight working hours. We believe that most or all of the turkeys present on Little Cumberland Island from 1963 onwards have been observed and that the data here presented are at least reasonably accurately reflective of the actual presence of the turkeys on the island.

For approximately 18 months after her settlement at Little Cumberland, Newman observed no turkeys at all despite her and her associates' wide and frequent ranging over the island. In late 1963 a single, small, dark female Wild Turkey was observed. Subsequently, a similar or the same small, dark female bird was seen irregularly and infrequently for two to three years. No other turkeys were observed during this time.

The above observations were followed by a number of years when no Wild Turkeys were seen. One of us (Sciple) specifically searched the island on repeated occasions during this period in an attempt to find such birds. None was ever seen. Further, no evidence was found of turkey tracks, feathers, droppings, scratchings in the forest-floor litter or the characteristic conical bill marks in the sand and litter.

In 1976 an observer reported seeing an adult female and three small poults. This female was a large, bronze-plumaged individual, clearly not the same small, dark female seen many years earlier.

Since 1976 there have been progressively larger numbers of sightings of both adult and immature birds of both sexes. Recently there has been a flood of sightings. In the late summer of 1980, turkeys were observed almost daily, often in groups of three to ten individuals. Many subadult and young birds were present in these groups.

In 1980, to date, three separate females with broods have been observed. One of these hens has a brood of 12 poults and another has a brood believed to number six. These poults, when first seen, were tiny, unfledged, and obviously unable to cross the water and marsh barriers separating Little Cumberland from any other land area. They must have hatched from eggs laid on the island.

Herbert L. Stoddard, on the basis of his extensive experience, informed Sciple many years ago that populations of free-living turkeys in the southeast varied considerably in their phenotypic expression. Some populations appeared to have the body type described, drawn, and painted by early ornithologists in the United States. Other populations resembled more closely the body shape and plumage color of domestic stock. The original wild stock was longer, slimmer, less heavy-breasted and more bronze in color than the birds in populations believed to have interbred with escaped domestic stock. The birds currently seen by us at Little Cumberland are all of long, slim, bronze type.

We believe, without absolute evidence, that Little Cumberland Island had no turkey population from 1966-1975, and that turkeys probably populated the island during 1976. Since 1976 there has been a rapid increase in numbers of these majestic and beautiful birds. This increase has been almost explosive in 1979 and 1980. The increase in population has occurred without direct intervention other than protection from human predation.

2601 Parkwood Drive, Brunswick, Georgia 31520 and P.O. Box 3127, Jekyll Island, Georgia 31520.

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GENERAL NOTES

LOONS AND GREBES ON LAKE LANIER — The Annotated Checklist of Georgia Birds (Denton et al. 1977) lists the Common Loon (Gavia immer) and Horned Grebe (Podiceps auritus) as "rare" in the interior of the state. It has been my observation that both are at least common winter residents on Lake Lanier. The Horned Grebe should in fact be considered abundant for in some winters it can be seen in the hundreds on the lake. I can not recall really searching for either of them on the lake in season without finding them. The Horned Grebes leave Lake Lanier in early April but the Common Loons regularly are still there into May. The numbers of both, but especially those of the loon, increase somewhat during spring migration.

My dates for arrival and departure of the Common Loon are 25 October 1970 and 26 May 1980, with two summer records for 1980. These were of a bird in winter plumage on 15 June and 14 July. For the Horned Grebe, my dates are 21 October 1980 and 15 April 1970, with three summer records for 1980. These were of a bird in breeding plumage 19 June, 2 and 14 July. All summer records were individuals that were probably injured.

John M. Paget, 1530 Vine Street, NE, Gaineville, Georgia 30501.

WHITE-FRONTED GOOSE SIGHTING IN FLOYD COUNTY — On 29 November 1980 at about 1430, Molly Munro and I were looking for ducks on a partially drained lake behind Floyd Junior College, near Rome in Floyd County, when we observed a White-fronted Goose (Anser albifrons) on the edge of a group of approximately three dozen American Wigeon. We looked at it for several minutes through 8X and 10X binoculars and checked its field marks — orange legs, white area on the face behind the bill, irregular dark markings on the underparts.

When we tried to approach for a closer view, the wigeons and the goose took flight and circled the lake for about five minutes. We waited for all the birds to settle back down onto the lake and then went to bring Mr. George Dorsey to see the goose and to corroborate our identification. He agreed with our finding, and the three of us took turns looking at the goose through Mr. Dorsey's 20X spotting scope. I returned to the lake two days later to see if the goose was still there, but it was gone.

To my knowledge, this is the first sighting of the White-fronted Goose in Floyd County. Since the goose is an occasional winter visitant to Georgia, I thought it appropriate to report the sighting.

Alan Spearman, 109 Robin Street, Rome, Georgia 30161.

ARBOREAL FORAGING BY CATTLE EGRETS — The Cattle Egret (Bubulcus ibis) uses at least 14 foraging behaviors depending on habitat and the presence of moving machinery and animals (Kushlan 1978,

p.249-297 in *Wading Birds*, National Audubon Society, New York). Typical foraging methods involve actively seeking, chasing, or stalking prey at ground level.

In Florida, Cattle Egrets were twice observed foraging arboreally by Kushlan (1979 Wilson Bull. 91:471-472). At this location the egrets captured prey by stabbing. On 17 June 1978, 9 egrets fed for at least 30 minutes on mayflies (*Ephemeroptera*) that were swarming around a sweetgum (*Liquidambar styraciflua*) at the edge of the Walter F. George Reservoir in Clay County, Georgia. The Cattle Egrets snapped mayflies in the air and gleaned them from branches while standing and walking slowly along the limbs of the sweetgum.

Mayflies have not been reported as food for Cattle Egrets. This observation points out the ability of the Cattle Egret to take advantage of a novel, short-lived, abundant resource.

Brent Ortego, 606 E. Beauregard, Ville Platte, Louisiana 70586.

HERONRY LOCATED IN ATKINSON COUNTY, GEORGIA — While attending a logging operation on 17 Mile River, approximately 9.6 km east of Douglas, Coffee County, Georgia, I noted large groups of White Ibis (Eudocimus albus) and Cattle Egrets (Bubulcus ibis) flying both north and south along the river course. Most of the morning flights were northerly and probably indicated a heronry south of this point. These flights were observed from mid May until 29 May 1979.

On 29 May 1979, I determined to locate the nesting colony and intercepted some of the larger flights heading south near 17 Mile River and flew in a small airplane about 300 m above and off to one side of their flight line. The nearly straight line of flight led me to the nesting site.

The site was approximately 19 km south of the original point of observation, in Atkinson County. A more exact location is 11.27 km northeast of Pearson and 1.2 km north of the Satilla River. The heronry is located in a man-made pond of approximately 20 ha which has a dam on both its east and west ends. The pond is on the farm of Winston Wright and he indicated that it had been occupied by these birds for many years. The nesting area stretched along the northern rim of the pond for about 1200 m in a stand of trees which extended out into the water for about 150 m.

On 1 June 1979, I drove to within 100 m of the pond and watched hundreds of White Ibis, Little Blue Herons (Florida caerulea) and Cattle Egrets moving into and out of the heronry. Another interesting observation concerned over 100 Black Vultures (Coragyps atratus) sitting around on the ground and on fence posts near a cow and hog lot adjoining the pond. They allowed me to approach within 10-15 m without flying. This scene was reminiscent of similar scenes I witnessed over forty years ago in South Georgia, but for some unexplained reason or reasons, not so in recent years. There was no visible evidence of carrion to attract them.

On 7 June 1979, C. William Dopson, Jr. and I entered the heronry

on foot and waded out to a depth of 1.5 m. The pond was covered with Duckweed (*Lemna* spp.) and harbored a large population of alligators (*Alligator mississippiensis*), some approaching 3 m in length. There was also evidence of the alligators nesting on the north side of the pond.

The pond vegetation consisted of Blackgum (Nyssa sylvatica), Pond Cypress (Taxodium ascendens), Sweet Bay (Magnolia virginiana), Water Tupelo (Nyssa aquatica), Water Willow (Decodon verticillatus), Virginia Willow (Itea virginica), Buttonbush (Cephalanthus occidentalis), and Smilax spp.

The bird inhabitants of the heronry included the following species in order of abundance: Cattle Egret, White Ibis, Little Blue Heron, Anhinga (Anhinga anhinga), Great Egret (Casmerodius albus), Common Gallinule (Gallinula chloropus), and Green Heron (Butorides striatus).

No attempt was made to census the heronry, although Cattle Egret nests numbered in the thousands and White Ibis nests in the hundreds. These two species had nests in all stages from egg to large young. One Common Gallinule nest in a *Smilax* tangle contained eight eggs, although we saw young gallinules of all ages.

On 3 July 1979, Robert L. Humphries and I flew over the site and photographed it from 500 m and 1000 m. Flights over colonial nesting sites at lower altitudes are dangerous to the plane's occupants and birds alike. On this date there appeared to be much more activity and more birds present than a month before.

On 5 June 1980, as I traveled east on Highway 158, large numbers of Cattle Egrets and White Ibis were observed flying due north at the point where 17 Mile River flows under the highway. The time was 0620 DST and the birds were moving at approximately 32 km per hour from the Satilla River heronry about 24 km south of this point, so they must have left on first feeding flights at about 0600 or possibly before sunrise.

Milton N. Hopkins, Jr., Route 5, Fitzgerald, Georgia 31750.

GROUND SPEEDS OF QUAIL — The literature on the Common Bobwhite (Colinus virginianus) contains much information on flight speeds of this species but very little on ground speeds attained by the birds.

Herbert L. Stoddard (1931, *The Bobwhite Quail: Its Habits, Preservation, and Increase.* Charles Scribner's Sons, New York) says "they are rapid and tireless runners" and on the wing mature quail "showed speeds ranging from 28 to 38 mph."

The opportunity to record and check ground speeds of quail came on 8-10 July 1979 near Osierfield in Irwin County, Georgia. On these dates we made over 100 trips to and from a hay field hauling stacks of hay behind a tractor. The route to and from the hay field was bordered on one side by a two-rut dirt road and an adjacent corn field. On numerous occasions on the first day of hay hauling, singles and pairs of quail ran from the corn field into the path of the tractor and ran ahead of it down a rut in the road barely a meter or two ahead of a front wheel.

Since many of these runs appeared long and rapid, I determined to attempt to measure the distance and speed. On the second day of hauling I began dropping a marker when quail began running and then stopped the tractor when they either took to wing or ran back into the corn field. The distance was then paced on foot.

Most modern tractors have a proof meter for accurately determining ground speeds in different gear ratios. It was used to record speeds. Many starts by quail were terminated within a few feet by their taking to the air. The following speeds and distances were recorded, however, for some of the longer runs. One cock, 900 feet at 10 mph or 14.6 ft/sec.; one pair, 600 feet at 10 mph or 14.6 ft/sec.; one cock, 400 feet at 10 mph or 14.6 ft/sec.

On several occasions I increased the speed of the tractor and the birds surged forward to 12 mph, but then dropped back to 10 mph when the machine slowed down.

These recorded running speeds probably approach the birds' maximum attainable speed, for if too hotly pursued by a predator most quail take to the air.

Milton N. Hopkins, Jr., Route 5, Fitzgerald, Georgia 31750.

EDITORIAL ASSITANCE. I wish to thank the members of the Editorial Committee who reviewed manuscripts published in volumes 44 and 45 of *The Oriole*, particularly Robert L. Crawford, Milton Hopkins, Jr., and Emil Urban. I am grateful to Patrick Brisse for compiling the species index for this issue, and to Terry Moore for the author index. Both indexes were edited by Terry and Peggy Moore. — The Editor.

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