itrina Pallas, 1771), it is necessary to find another name for the Barn Owl, for which the earliest available name appears to be *Strix alba* Scopoli (Ann. I, 1769, p. 2). For those who consider the North American Barn Owl as a subspecies of the European, the name for the American form will be *Aluco albus pratincola* (Bonap.).

TREGANZA BLUE HERON.

BY EDWARD J. COURT.

Plates V and VI.

THIS subspecies has been under my consideration for some time and through Mr. A. O. Treganza, Salt Lake City, Utah, I obtained a specimen, and I have honored him by naming the species *Ardea herodias treganzai*, Treganza Blue Heron.

I wish to express my best thanks to Mr. Harry C. Oberholser, Biological Survey, Agricultural Department, Washington, D. C., who greatly assisted me in describing the subspecies; also to Mr. Robert Ridgway, Smithsonian Institution, who agreed with me that it was a good race; and to Dr. Charles W. Richmond, Smithsonian Institution, for access to the large and handsome series of Great Blue Herons.

Ardea herodias treganzai, new subspecies.

Subspecific characters:— Similar to *Ardea herodias herodias*, but much paler on the neck and upper parts; resembling *Ardea herodias wardi*, but smaller and even paler.

Type:— ♀ adult, No. 208756, Smithsonian Institution, Egg Island, Great Salt Lake, Utah; collected April 10, 1907, by Mr. A. O. Treganza.

Forehead and crown white; superciliary stripes black, connecting behind with the black crest, middle feathers of which are 183 mm. in length; lores and ear coverts white; sides of neck very pale cinnamon rufous; interscapular and scapular regions pale bluish slate changing to a silver bluish gray towards ends of feathers; rump deep bluish; tail terminally

EGG ISLAND, GREAT SALT LAKE, UTAH.

Nesting colony of Great Blue Herons, Cormorants and Gulls.

NEST AND EGGS OF GREAT BLUE HERON (LOWER NEST) AND DOUBLE-CRESTED CORMORANT (UPPER NEST).

NEST AND EGGS OF GREAT BLUE HERON.

bluish black; under tail coverts pure white; bend of wing bright chestnut mixed with white; upper wing coverts and secondaries bluish becoming darker where they overlap the ends of the primaries; primaries bluish black; under wing and primary coverts and axillaries bluish; postocular region, chin, cheeks, and throat white gradually changing into pale cinnamon rufous, the median line formed by a distinct row of black, white and bright reddish chestnut brown feathers; breast and abdomen broadly streaked with white; flanks dark bluish slate; thighs deep reddish brown; bill black.

Geographical distribution:—Great Salt Lake, Utah, Arizona, Texas, and California.

MEASUREMENTS OF *Ardea herodias treganzai.*

Smithsonian No.				*Wing.*	*Tail.*	*Culmen.*	*Tarsus.*	*M. Toe.*
9472	——	Sacramento Valley, Cal.	——	469.9	178	140	180	109
11706	♀ ad.	Fort Clark, Texas	Jan. 24, 1898	463.5	171	140	172	102
125829	♀ ad.	Mexico, near El Paso, Texas	Feb. 27, 1892	476.2	172	133	172	101
131506	♀ ad.	Fort Lowell, Ariz.	Nov. 7, 1893	467.3	178	140	177	105
133029	♀ ad.	Colorado River, Monument No. 204.	Mar. 22, 1894	469.9	171	142	165	100
133775	♀ ad.	Gardiners Lagoon, Cal.	Apr. 14, 1894	469.9	175	148	165	102
208756	♀ ad.	Gt. Salt Lake, Utah	Apr. 10, 1907	469	177	135	173	108

Average Measurements.

	Wing.	*Tail.*	*Culmen.*	*Tarsus.*	*M. Toe.*
Ardea herodias treganzai	469.5	174.5	139.5	172	104
Ardea herodias	483.5	178	146	181	108
Ardea herodias wardi	506	193	169	204	124

I am indebted to Mr. Treganza for the following field notes.

Salt Lake City, Utah.
December 4, 1907.

FRIEND COURT:—

The following is a copy of the field notes on the *Ardea herodias* and a slight description of the different islands where I have found this species breeding, in this locality, with a series of photographs.

White Rock Island is an almost solid body of quartz, about 175 feet by 100 feet, rising shear out of the water on three sides. Extreme height about 25 feet. Located about one-half mile off shore, in a small cove on the northwest end of Antelope Island, Great Salt Lake, Utah.

White Rock, May 15, 1905. Eight pairs found breeding. Four nests contained young; one nest contained both young and eggs; the remaining three nests contained eggs badly incubated. Four other nests were found from which the young had but recently gone. One set of four eggs taken.

Nests composed of sticks, principally of the sage bush, and placed in a rather loose sort of manner between two points of rocks or small hollows. Little or no difference seems to be made in the composition of the inner

and outer nest; in fact there is really no inner nest or lining, and the depression which receives the eggs and contains the young is very slight. The carcass of fish are very plentiful about nests containing young.

The old birds were very retiring, remaining over on the shore of Antelope Island while we were on the White Rock. Nesting in company with *Larus californicus.*

White Rock, May 10, 1906.— Same number of nests as were found May 15, 1905, except that all nests were occupied by either young or eggs.

Hat Island.— The name well describes its form as it appears from a distance. It lies about twenty-five miles due west of White Rock Island and four miles north of Carrington Island, on the west side of the Lake. Three fourths and one half mile are its greatest dimensions, length and breadth. Rises about 90 feet above water line. Formation, decomposed rock, boulders, and sand. Thorny sage and weeds are about the only vegetation to be found.

Hat Island, May 8, 1906.— Found a colony of forty pairs. All stages of nidification existed, except nest building. There seems to be a decided difference in the disposition of the young. Some show signs of fight as soon as you make your presence known, while others pay little or no attention to your doings.

The nests here are placed, some on the rocks and some on top of the large thorny sage bushes which grow from 4 feet to 5 feet high. Some of the nests are very beautiful, being built out of sage branches that have been exposed to the elements until they have become a most subtile gray tone, that fairly vibrates under sunlight. Some of the nests measure from 4 to 5 feet in diameter.

The nearest feeding ground for these birds is the mouth of the Jordan River, some thirty-five miles, almost due east of the island. The flight to the feeding grounds begins about 3 A. M., and by sun-rise all the birds that are going for that day have left the island, except a few isolated cases which may be seen going and coming all day long, the main body returning so that they reach the island by sun-down. Some of these birds travel fifty or sixty miles from the island for food.

A certain portion of the birds always remain on the island during the day. Even were it not for the incubation of the eggs and the care of the young, this would be made necessary through the fact that as soon as a nest of eggs is left unprotected it is immediately pounced upon by the *Larus californicus,* who crack the eggs by pecking and feed on their contents.

Here *Ardea herodias* is nesting in company with *Larus californicus* and *Pelecanus erythrorhynchos.*

Hat Island, Sept. 10, 1907.— Not a Blue Heron to be found on the island. Neither have we found a nest of addled eggs. The birds must have been very successful in the rearing of their young or else the Gulls devoured anything that might have been left.

Much to our surprise we found there had been a tremendous increase in

the number of nests over those which we found last year. On May 8, 1906, we found birds nesting only on the east and northeast end of the island. This year we find that they have circled the island with their nests, with the exception of the southwest end, which is rather sandy and barren of sage and boulders.

Egg Island is a detached reef at the extreme north end of Antelope Island, 300 feet or more in diameter, about one-half mile off shore. Composed mostly of reef rocks but with some little sand patches.

Egg Island, May 11, 1906.— Here the *Ardea herodias* nests in company with *Larus californicus* and *Phalacrocorax dilophus.* This island contained about fifty breeding pairs. All stages of nidification existed except nest building. The nearest feeding ground for the birds on this island is about fifteen miles.

The nests on this island are all placed on the higher boulders among the reef rocks, usually beside a large boulder. The boulder is used as a perch for the owner of the nest beneath. Apparently the birds consider this boulder as much a part of their possession as the nest, for should another attempt to alight on a perch that is not his own, he is immediately and properly punished for his trespassing. Such an occasion as this is the only time I have ever seen the adult birds show any signs of quarreling.

Some of the nests on this island are very handsomely and wonderfully made, two or three nests measuring each about 5 feet in diameter. Most of the sticks used in constructing the nest are of the sage bush. Apparently these nests are very old and have been used for many years, a little bit being added each year in the way of rebuilding and house cleaning. It seems quite remarkable that the young do not injure themselves from the large, coarse sticks which form the inner nest, if the same could be called an inner nest. The depression of the nests is very slight. The depression starts from the outer edge of the nest and very gradually sinks into the center.

The birds on this island seem to be more filthy than those seen elsewhere. By the time the entire clutch of eggs is laid, the first two or three eggs laid are entirely speckled over the surface with lice markings. Upon lifting up eggs that are in an advanced stage of incubation, the center of the nest seems to be a seething mass of lice, which must undoubtedly greatly annoy the young when hatched.

Four, five, and six eggs seem to form the complete set, four or five being the usual complement, six rarely. A number of photographs were taken on this date of both young and eggs.

Egg Island, April 9, 1907.— I do not wonder that some of the young are fully fledged and leave their nests before the middle of May, as we found three nests containing young from three to four weeks old.

About twenty-five nests contained fresh eggs. None of the eggs seemed to be at all incubated; hence there must have been several exceptionally early arrivals. There seemed to be a number of new nests under construction. Two birds killed for identification. Several photographs taken.

Egg Island, May 16, 1907.— I find about fifty per cent. more nests on the island this year than last, or, in other words, about seventy-five pairs of breeding birds have nested there. There are only about five sets of fresh eggs. All the other nests either contained young or eggs well advanced in incubation.

The young are extremely interesting, especially those that are sufficiently fledged to walk about upon the rocks but are yet too timid to attempt flight. The photograph taken gives a very good idea of how close one can approach these almost fully fledged birds. The photograph was taken at a distance of about 6 feet.

Egg Island, Sept. 14, 1907.— Not a Heron left, but a count of the nests shows about fifty per cent. increase over last year.

General Remarks.— On first observation the nests of the Great Blue Heron appear very flimsy, especially the edges, which seem to be very much frayed out and loose. One would think that the storms of a winter would entirely demolish these nests, but on close observation it is found that they are most compactly made, and it is quite evident that the same nests are used from year to year with but very little rebuilding in the spring. One can very easily tell where new sticks have been added, from the fact that they are not sun-bleached, as are the old sticks in the nest.

From seeing the size of the new nests that have been built this year and comparing them with the older nests, one would be very safe in saying that these large old nests are the pioneer homes of these birds and mark their first advent to Great Salt Lake, the date of which we shall omit.

The writer had some little experience with *Ardea herodias* in California. There are some two or three colonies between San Diego and Los Angeles, and in all cases, nests are built in tops of the highest trees. The Eucalyptus seems to be quite a favorite nesting site for this bird. It is not for lack of trees that the bird chooses low elevations for nesting here in Utah, for on Antelope Island, which is not five miles from either Egg Island or White Rock, may be found groves of cedars that are 30 to 50 feet high.

The following is only hearsay, that Utah Lake contains a small colony of these birds. One trip was made to that lake but no nests were found. However, many of the birds were seen feeding and in all probability there is a colony breeding on this lake.

Captain Davis, of Salt Lake, tells me that these birds nest very abundantly on Gunnison Island, more so than on any other island in Great Salt Lake. They are nesting in company with *Larus californicus* and *Pelecanus erythrorhynchos.* Captain Davis has been to this island many times, and it is undoubtedly safe to assume that he is correct in his statement, as he is a very close observer of nature generally.

It is also stated, but I could not vouch for the authority, that there is a colony of these birds nesting in the mouth of Bear River. While we have made two attempts to find the colony, we have as yet been unable to do so. If a colony of these birds does exist at the mouth of Bear River, they are of necessity compelled to nest in the broken down reeds and rushes, as does the Black-crowned Night Heron.

The following shows measurements of eggs:

A set of five rather long eggs: 2.59 × 1.79, 2.69 × 158, 2.73 × 179, 2.60 × 1.80, 2.57 × 1.79.

A set of five rather round eggs:— 2.56 × 1.93, 2.58 × 1.86, 2.51 × 1.89, 2.48 × 1.91, 2.50 × 1.90.

A set of three extremely large eggs: 2.76 × 1.94, 2.75 × 1.91, 2.74 × 1 92.

A set of three extremely small eggs: 2.45 × 1.82, 2.51 × 1.80, 2.52 × 1.72.

A set of six typical eggs: 2.57 × 1.83, 2.61 × 1.77, 2.55 × 1.78, 2.56 × 1.79, 2.57 × 1.81, 2.58 × 1.80, 2.574 × 1.816.

The average size, taken from ten sets,— namely: three sets of three each; four sets of four each; two sets of five each; one set of six, is 2.574 × 1.816 inches.

I endeavored this year to ascertain the exact length of time required for incubation; also from hatching to flight; but found it impossible, owing to the distance and time consumed in reaching their breeding ground.

These notes have been culled from data taken by my father and myself.

Trusting that this may be of some little benefit to you, I remain,

Your most sincere friend,

A. O. TREGANZA.

LARUS KUMLIENI AND OTHER NORTHERN GULLS IN THE NEIGHBORHOOD OF BOSTON.

BY FRANCIS H. ALLEN.

IN reporting in 'The Auk' for April, 1905 (Vol. XXII, p. 205) the taking of a Kumlien's Gull at Moon Island, Boston Harbor, on February 22, 1905, I ventured, though the bird had not previously been recorded from Massachusetts,[1] to say that its presence here was "probably in a sense normal rather than accidental, being simply a southward extension of its usual winter range in a season of unusual severity." The experience of the past winter (1907–08) seems to indicate that *Larus kumlieni* is indeed of normal occurrence on the Massachusetts Coast and not by any means

[1] Dr. Dwight has since recorded an earlier specimen, a young female taken at Plymouth, Mass., January 5, 1888, and now in the Rothschild Museum at Tring, England (Auk, Jan., 1906, XXIII, 41).