

## NOTES ON THE EUROPEAN CRESTED TITMICE.

BY LEONHARD STEJNEGER.

The direct comparison of three Scandinavian examples with a series from Central Europe reveals a difference in the coloration of the Crested Titmice from these localities, which necessitates their separation.

The three birds from Norway and Sweden agree completely *inter se* on one hand, and so do the German and Hungarian specimens on the other.

The former are grayer above, the latter more brownish, but the exact shade is very difficult to describe. Consulting Ridgway's "Nomenclator of Colors," pl. iii, I should say that the northern examples have the back "Isabella" gray, while those from the South are "wood-brown" gray. The difference in the coloration of the flanks is of the same kind but even more striking, for here the gray ground color is absent and the flanks are therefore, respectively, "Isabella colored" and "wood-brown" without further qualification.

It is curious that the difference between these forms has been overlooked by most ornithologists, since they are quite as distinct as are *Sitta casia* and *Sitta europæa*.

As to the name of the Crested Titmice, the case is identical with that of the two Nuthatches just referred to. The name given by Linnaeus will have to be reserved for the Scandinavian form, which will stand as *Parus* (or *Lophophanes*) *cristatus* LINN. The appellation *Parus mitratus*, which Brehm, in 1831, bestowed upon an alleged form of the Central European bird, seems available for the German and Hungarian race. Intergradation being the test for the use of trinomials I defer calling the bird in question *Parus cristatus mitratus* until the intergradation shall have been fairly proven, if in reality it does exist.

It would be very interesting to know whether the Crested Titmouse which inhabits Scotland belongs to either of the two forms indicated above, or whether it shows any peculiarity of its own entitling it to separate recognition. British ornithologists not prejudiced against possibilities of this kind ought to look into the matter.

*Measurements of Parus cristatus.*

U. S. Nat. Mus. No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Bill from nostrils.	Tarsus.	Middle toe with claw.
113227	.....	♂ ad	Bergen, Norway ...	Aug. 18, 1887	61	48	7.5	18.5	14
113228	.....	♀ ad	do .....	Sept. 18, 1887	64	51	8	18	.....
111401	5546 .....	♂ ad	Vermland, Sweden	Mar. 6, 1882	60	50	8	.....	.....

*Measurements of Parus mitratus.*

Museum and No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Bill from nostrils.	Tarsus.	Middle toe with claw.
U. S. Nat., 9220.....	v. Müller.....	♂ ad.	Nuremberg, Germany.	Jan. 14, 1848	63	50	7.5	19	.....
U. S. Nat., 105370.....	.....	♂ ad.	Moravia, Austria.	.....	68	56	8	19	.....
U. S. Nat., 105371.....	.....	♂ ad.	Silesia, Germany.	Sept. 20, 1882	64	51	8	19	15
U. S. Nat., 69975.....	Burchard.....	♀ ad.	Rostock, Germany.	.....	63	51	7	19	15.5
U. S. Nat., 56530.....	Schlüter, 553.....	♀ ad.	Saxony, Germany.	.....	65	50	8	.....	.....
U. S. Nat., 111402.....	Madarasz.....	♀ ad.	Hungary.....	Oct. 15, 1884	64	53	7.5	18	.....
U. S. Nat., 111400.....	do.....	♀ ad.	Oravitz, Hungary.	Sept. 16, 1883	63	49	7.5	18	14
U. S. Nat., 111403.....	do.....	ad.	do.....	Oct. 4, 1883	65	52	8	19	15
Am. Mus., N. Y., 234	Max.....	♂ ad.	Newwied, Germany.	.....	63	50	8	.....	.....
Am. Mus., N. Y., 235	do.....	♀ ad.	do.....	.....	63	47	8	.....	.....