CATTLE EGRET

Successful management of mudballing in *Bubulcus ibis* - A case report



Egret with mudball

Aves [Class of Birds] Pelecaniformes [Order of medium-sized and large waterbirds] Ardeidae

[Family of wading birds]

Bubulcus ibis [Cattle Egret]

Species described by Linnaeus in 1758

> **IUCN Red List:** Least Concern (BirdLife International, 2016)

Cattle Egret *Bubulcus ibis* belongs to the order Ciconiiformes and family Ardeidae (Ali 1996). The Cattle Egrets acquired the name due to their feeding habit in association with livestock and riding over the back and take the insects over the cattle. They generally feed on invertebrates, amphibians and reptiles disturbed by grazing animals and also insects from freshly ploughed fields. It is a gregarious bird, seen in small gatherings nearby grazing livestock and near water source by running in and out between their legs, and attacking the insects present in the water also. Due to its primarily insectivorous behaviour, Cattle Egret is considered as a biological insect pest control agent in an agroecosystem (Patankar et al. 2007). Chronic accumulation of mud, feces and black soil around the foot and formation of hard ball like structure is called mudballing. Mudballing occurs mainly

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due to adherence nature of materials during their inhabitants (Laurie & Rebecca 2007). Hardness of the mud ball varies with the type of material adhered to the foot. If the

problem becomes very severe, the bird may be unable to walk or move naturally. Present communication reports the successful removal of mud ball in an egret.

Case History and Observations

A young egret was found struck in-between the creepers in a garden. It was identified by sound of vigorous movements of the dried plants and leaves. It was rescued from the site and allowed freely, but it was unable to fly. It had a mud ball over the left leg



Immersion of the leg in the water containing Dioctyl sodium sulfosuccinate

Global Distribution:

Native: Algeria, Angola, Anguilla, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belize, Benin, Bermuda, Bhutan, Bolivia, Plurinational States of Bonaire, Sint Eustatius and Saba (Saba, Sint Eustatius), Botswana, Brazil, Brunei Darussalam, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Cayman Islands, Central African Republic, Chad, Chile, China, Cocos (Keeling) Islands, Colombia, Comoros, Congo, Congo, The Democratic Republic of the Costa Rica, Côte d'Ivoire, Cuba, Curaçao, Cyprus, Djibouti, Dominica, Dominican Republic, Ecuador (Galápagos - Introduced), Egypt, El Salvador, Equatorial Guinea, Eritrea, Ethiopia, Falkland Islands (Malvinas), France, French Guiana, Gabon, Gambia, Georgia, Ghana, Gibraltar, Greece, Grenada, Guadeloupe, Guam, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, India, Indonesia, Iran, Islamic Republic of Iraq, Israel, Italy, Japan, Jordan, Kazakhstan, Kenya, Korea, Democratic People's Republic of Korea, Republic of Kuwait, Lao People's Democratic Republic, Lebanon, Lesotho, Liberia, Libya, Macao, Madagascar, Malawi, Malaysia, Maldives, Mali, Marshall Islands, Martinique, Mauritania, Mauritius, Mayotte, Mexico, Micronesia, Federated States of Montenegro, Montserrat, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Northern Mariana Islands, Oman, Pakistan, Palau, Palestinian Territory, Occupied Panama, Papua New Guinea, Paraguay, Peru, Philippines, Portugal, Puerto Rico, Qatar, Réunion, Romania, Russian Federation (Eastern Asian Russia - Vagrant, European Russia), Rwanda, Saint Barthélemy, Saint Helena, Ascension and Tristan da Cunha, Saint Kitts and Nevis, Saint Lucia, Saint Martin (French part), Saint Vincent and the Grenadines, Sao Tomé and Principe, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Sint Maarten (Dutch part), Somalia, South Africa, South Georgia and the South Sandwich Islands, South Sudan, Spain (Canary Is.), Sri Lanka, Sudan, Suriname, Swaziland, Syrian Arab Republic, Taiwan, Province of China, Tanzania, United Republic of, Thailand, Timor-Leste, Togo, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Turks and Caicos Islands, Uganda, United Arab Emirates, United States (Hawaiian Is. - Introduced), United States Minor Outlying Islands, Uruguay, Venezuela, Bolivarian Republic of, Viet Nam, Virgin Islands, British, Virgin Islands, U.S., Western Sahara, Yemen, Zambia, Zimbabwe (BirdLife International, 2016)

and it was around six centimetres in radius. Mud balls were dry and very hard formed of clay from black soil. The bird showed little anxiety and was looking dull.

Treatment and Discussion

The legs were immersed in the water containing Dioctyl sodium sulfosuccinate (10% solution) for about 10 minutes. Mud was softened and removed using foreceps. Collected mud from the bird weighed about 100g. It took about twenty minutes for careful removal of the mud and the bird was administered vitamin drops orally to prevent the stress caused by the handling. After complete removal of the mud ball, the bird was able to walk freely and could fly without any difficulty. "Balling up" of the toes is very common on heavy soils especially with young stock. During continued rains in early summer, clay soil adhere to feet of young birds and forme great balls of mud. Mudballing

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of the feet had been reported in pheasants, patridges and the young birds were unable to move freely and died from starvation, exhaustion or exposure (Laurie & Rebecca 2007). Dioctyl sodium sulfosuccinate was a wetting, penetrating agent and surface tension reducer. It produces the effect by reducing the surface tension and allowing water to penetrate the mass (Eghianruwa 2014). Dioctyl sodium sulfosuccinate in water was used for breaking up the mud ball in the present case and was found to be easier when compared to water alone.



Egret free from the mudballing

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