

SPIZAETUS

NEOTROPICAL RAPTOR NETWORK BULLETIN

ISSUE 27

JUNE 2019

BUTEO PLATYPTERUS IN COSTA RICA

MILVAGO CHIMACHIMA IN COSTA RICA

ASIO STYGIUS IN COLOMBIA

BUTEO BRACHYURUS IN MEXICO

FALCO FEMORALIS IN MEXICO

SPIZAETUS

NRN NEWSLETTER

Issue 27 © June 2019
English Edition, ISSN 2157-8958

Cover Photo: Juvenile Broad-winged Hawk (*Buteo platypterus*) in Costa Rica

© Víctor Acosta-Chaves

Translators/Editors:
Laura Andréa Lindenmeyer de Sousa & Marta Curti

Graphic Design: Marta Curti

Spizaetus: Neotropical Raptor Network Newsletter © June 2019

www.neotropicalraptors.org

This newsletter may be reproduced, downloaded, and distributed for non-profit, non-commercial purposes. To republish any articles contained herein, please contact the corresponding authors directly.



TABLE OF CONTENTS

UNIQUE BEHAVIOR OF YELLOW-HEADED CARACARA (<i>MILVAGO CHIMACHIMA</i> : FALCONIDAE) IN SOUTHERN COSTA RICA <i>José Manuel Mora & Estefanía González</i>	2
NEW LOCATIONS IN COLOMBIA FOR STYGIAN OWL (<i>ASIO STYGIUS</i>) <i>Elvis Felipe Quintero Quintero, Jeyson Sanabria-Mejía, Angélica Magali Sogamoso Hernández & Sergio Chaparro-Herrera</i>	9
A CASE OF AGGRESSION BY <i>BUTEO BRACHYURUS</i> AGAINST <i>PSEUDASTUR ALBICOLLIS</i> (ACCIPITRIFORMES) IN SOUTHERN HUIMANGUILLO, TABASCO, MEXICO <i>Saúl Sánchez Soto</i>	13
STREET FOOD: AN UNUSUAL RECORD OF A BROAD-WINGED HAWK (<i>BUTEO PLATYPTERUS</i>) FORAGING IN A DUNG PILE <i>Víctor J. Acosta-Chaves, Paula C. Acosta-Chaves & Adriana P. Acosta-Chaves</i>	16
NEW RECORD OF APLOMADO FALCON (<i>FALCO FEMORALIS</i>) IN CENTRAL MEXICO <i>Carlos A. Cruz González & Daniela Medellín Alvarado</i>	20
OF INTEREST	24

The NRN is a membership-based organization. Its goal is to aid the research and conservation of Neotropical raptors by promoting communication and collaboration among biologists, raptor enthusiasts, and other conservationists working in the Neotropics. To join please e-mail the NRN coordinator, Marta Curti, at mcurti@peregrinefund.org, stating your interest in Neotropical raptor research and conservation.

UNIQUE BEHAVIOR OF YELLOW-HEADED CARACARA (*MILVAGO CHIMACHIMA*: FALCONIDAE) IN SOUTHERN COSTA RICA

By **José Manuel Mora**¹ and **Estefanía González**¹

¹Carrera de Gestión Ecoturística, Sede Central, Universidad Técnica Nacional, Alajuela, Costa Rica.

E-mail: josemora07@gmail.com

The Yellow-headed Caracara (*Milvago chimachima*) has a wide distribution in Central and South America (BirdLife International 2018). Currently, it is distributed from Honduras, where it has been occasionally observed (Fagan and Komar 2016) to northern Argentina and Uruguay, east of the Andes (BirdLife International 2016). It is found from sea level to 1,800 m.a.s.l. although it has been occasionally observed at up to 2,600 m.a.s.l. (BirdLife International 2018).

In both Central and South America, the species' distribution and the population size have been expanding (Stiles and Skutch 1995, BirdLife International 2018). For example, in South America, Yellow-headed Caracara populations are increasing due to deforestation in high altitude areas of the Andes and the conversion of lowlands into pasturelands for cattle (del Hoyo et al. 1994). The bird is considered frequent in general and is becoming common in some places (Ridgely and

Gwynne 1989, Garrigues and Dean 2014), and abundant in others (Fischer-Barcellos and Vargas-Cademartori 2010). Because of this, it is categorized as a species of Least Concern (LC) in the IUCN Red Book (IUCN 2018). Even so, little is known about local movements and other aspects of this species' biology (De La Ossa and De La Ossa-Lacayo 2011).

The Yellow-headed Caracara is generally found in open areas, particularly cattle pastures, agricultural fields, treed savannas, forest edges and along rivers (Meyer and Phelps 1978). In open areas, it does require at least some scattered trees (Meyer and Phelps 1978). It spends more time in trees than the Crested Caracara (*Caracara cheriway*). Its nest is a platform on the branches of trees or palms (Stiles and Skutch 1995) where it often perches (Meyer and Phelps 1978). A pair generally lays 2 eggs per clutch, though the number can vary between 1 and 3. The eggs range in color



Figure 1. Observation point (yellow pin) of a Yellow-headed Caracara (*Milvago chimachima*) on the road to La Casona, Indigenous Territory Ngöbe Bukle käite Jukribta, Coto Brus, Costa Rica.

from suede to reddish brown, with dark spots (Stiles and Skutch 1995). In Costa Rica, breeding season lasts from December to March or April (Stiles and Skutch 1995). This species is generally solitary, or found in small groups (Meyer and Phelps 1978). It does exhibit some degree of social behavior due to the fact that several individuals have been observed perching in the same tree (De La Ossa and De La Ossa-Lacayo 2011).

It is an omnivorous species, feeding on carrion, small vertebrates (frogs, fish, nestling birds, small mammals), insects and other arthropods, and some vegetable matter (Hilty and Brown 1986). It also feeds on earthworms (Annelida) and has been observed communally on the backs of livestock and other large mammals capturing ticks (Sazima 2007, De La Ossa and De La Ossa-Lacayo 2011).

Although it is primarily a scavenger (Ridgely and Gwynne 1989), it also captures live prey including fish. It also eats cattle and horse feces (Sazima and Olmos 2009, De La Ossa et al. 2018a).

The Yellow-headed Caracara measures from 41 to 46 cm (Meyer and Phelps 1978). Males weigh between 280 and 330g and females between 310 and 360 g (Anderson 1994). Apart from the difference in size, this species does not exhibit other forms of sexual dimorphism. The adults have a pale blue bill, a yellow cere and periocular area, greenish legs and reddish-brown eyes (Meyer and Phelps 1978, Stiles and Skutch 1995, Ridgely and Gwynne 1989). The head, neck and lower belly are cream-colored with brown in the crown and a postocular dark brown line. Its back is dark-coffee-colored, as are the wings, which also



Figure 2. Yellow-headed Caracara with small rocks in its beak, which it later discarded (three events), on the road to La Casona, Indigenous Territory Ngöbe Bukle käite Jukribta, Coto Brus, Costa Rica. Photos © José M. Mora.

have white and black spots at the base. The tail is cream with undulating bars and a dark, wide subterminal band. Juveniles are similar to adults, but are browner above; the parts that are cream-colored in adults, are dark brown dotted with blackish-brown in young birds.

Observation

On 11 November 2018, we observed an adult Yellow-headed Caracara in the middle of the road between the Sabanillas and La Casona communities, within the territory of the indigenous Ngöbe Bukle käite Jukribta in the canton of Coto Brus, Puntarenas, Costa Rica (8° 52' 01.99'' N, 83°

03' 45.33'', 732 m a. s. l. Figure 1). The land in the area is used mainly for agricultural purposes, particularly for livestock. There are some forest remnants, especially along the streams and fences (Figure 1) and some crops, such as African Palm. We observed the caracara picking up something from the road, which we initially thought was carrion. However, we soon noticed that it was apparently selecting a rock from the road.

The caracara picked up and tossed aside three small rocks (Figure 2). Finally, it picked up a fourth rock, which was larger than the previous

three (Figure 3) and flew with it into a nearby tree. Unfortunately, we weren't able to follow the individual to see what it did with the rock.

Discussion

The use of tools is a typical feature of the apes (Hominidae), but is uncommon in other vertebrates (Alock 1972). However, the use of tools has been documented in several bird species (Shumaker et al. 2011, Barcell et al. 2015). Parrots use tools to grab and open nuts (Emery 2006). Several crow species (Corvidae) use twigs, wood and sometimes metal wire to trap or impale larvae (Hunt



Figure 3. Yellow-headed Caracara with rock number 4, which it picked up and carried to a nearby tree on the way to La Casona, Indigenous Territory Ngöbe Bukle káite Jukribta, Coto Brus, Costa Rica. Photo © José M. Mora.

1996). Finches and woodpeckers can insert twigs in holes in trees to trap or impale larvae (Burrell et al. 2015). Other birds use human activity to their advantage, such as some species of gulls, that drop oysters in front of moving cars to crush them open (Henry and Aznar 2006).

However, one of the most interesting and well-known cases is that of the Egyptian Vulture (*Neophron percnopterus*), which eats Ostrich (*Struthio camelus*) eggs, by breaking them with rocks (Van Lawick-Goodall and Van Lawick 1966). This bird also eats Griffon Vulture (*Gyps fulvus*) eggs using the same technique (Barcell et al. 2015).

The Yellow-headed Caracara is opportunistic and omnivorous, but has only been documented to eat eggs of one bird species, the Bi-colored Wren (*Campylorhynchus griseus*) (De La Ossa et al. 2018b). De La Ossa et al. 2018a indicated that they eat “bird nests” but didn’t give more details. The Yellow-headed Caracara has not been documented consuming eggs of large birds, such as those of vultures or poultry. However, it is possible that this species uses rocks to break into large eggs.

We present this information with the goal of stimulating more observations of this species and this unique behavior described here.

Acknowledgements

We visited Coto Brus with the support of the School of Ecotourism of the National Technical University, Central Headquarters, Alajuela, Costa Rica.

References

- Alcock, J. 1972. The evolution of the use of tools by feeding animals. *Evolution* 26: 464–473.
- Anderson, M.B. 1994. *Sexual Selection*. Princeton: Princeton University Press.
- Barcell, M., J.R Benítez, F. Solera, B. Román and J.A. Donázar. 2015. Egyptian Vulture (*Neophron percnopterus*) uses stonethrowing to break into a Griffon vulture (*Gyps fulvus*) egg. *The Journal of Raptor Research* 49(4): 521-522.
- BirdLife International. 2018. Species factsheet: *Milvago chimachima*. (retrieved from <http://www.hbw.com/node/62184> on 15 November 2018).
- De La Ossa J. and A. De La Ossa-Lacayo. 2011. Aspectos de la densidad poblacional e historia natural de *Milvago chimachima* (Aves: Falconidae) en el área urbana de Sincelejo (Sucre, Colombia). *Universitas Scientiarum* 16(1):63–9. <https://doi.org/10.11144/javeriana.SC16-1.aotp>
- De La Ossa J., A. De La Ossa-Lacayo and D. Montes. 2018a. Ethological annotations of *Milvago chimachima*, Vieillot, 1816 (Aves: Falconidae). *Revista Medicina Veterinaria y Zootecnia Córdoba* 23(1): 6514-6522. DOI: 10.21897/rmvz.1246

- De La Ossa, J., D. Montes Vergara and A. Pérez-Cordero. 2018b. Population Abundance and Feeding Annotations for *Milvago chimachima* (Aves: Falconidae) in Santiago de Tolu, Sucre, Colombia. Indian Journal of Science and Technology 11(30): 1-5. DOI: 10.17485/ijst/2018/v11i30/122946
- del Hoyo, J., N.J. Collar, D.A. Christie, A. Elliott and L.D.C. Fishpool. 2014. HBW and BirdLife International Illustrated Checklist of the Birds of the World. Lynx Edicions BirdLife International, Barcelona, Spain and Cambridge, UK
- Emery, N.J. 2006. Cognitive ornithology: The evolution of avian intelligence. Philosophical Transactions of the Royal Society B. 361 (1465): 23–43. doi:10.1098/rstb.2005.1736.
- Fagan, J. and O. Komar. 2016. Field Guide to Birds of Northern Central America. Peterson Field Guides, New York: Houghton Mifflin Harcourt.
- Fischer-Barcellos S.M. and C. Vargas-Cademartori. 2010. Estudo comparativo da avifauna em áreas verdes urbanas da região metropolitana de Porto Alegre, Sul do Brasil. Revista Biotemas 23(1): 181-195.
- Garrigues, R., R. Dean. 2014. The Birds of Costa Rica: A Field Guide. Second edition. Ithaca: Cornell University Press.
- Henry, P.Y. and J.C. Aznar. 2006. Tool-use in Charadrii: Active Bait-Fishing by a Herring Gull. Waterbirds. 29(2): 233–234. doi:10.1675/1524-4695(2006)29[233:TICABB]2.0.CO;2
- Hilty S, and W. Brown. 1986. A guide to the Birds of Colombia. Princeton: Princeton University Press.
- Hunt, G.R. 1996. Manufacture and use of tools by New Caledonian Crows. Nature 379: 249–251.
- Meyer, R. and W.H. Phelps. 1978. A Guide to the Birds of Venezuela. Princeton: Princeton University Press.
- Ridgely, R.S. and J.A. Gwynne. 1989. A Guide to the Birds of Panama, with Costa Rica, Nicaragua and Honduras. Princeton: Princeton University Press.
- Rutz, C., B.C. Klump, L. Komarczyk, R. Leighton, J. Kramer, S. Wischniewski, S. Sugawara, M.B. Morrissey, R. James, J.J.H. St Clair, R.A. Switzer and B.M. Masuda. 2016. Discovery of species-wide tool use in the Hawaiian crow. Nature 537: 403-407.
- Sazima I. 2007. Unexpected cleaners: Black Vultures (*Coragyps atratus*) remove debris, ticks, and peck at sores of capybaras (*Hydrochoerus hydrochaeris*), with an overview of tick-removing birds in Brazil. Revista Brasileira de Ornitologia 15(3): 417-426.
- Sazima, I. and Olmos, F. (2009) The chimango caracara (*Milvago chimango*), an additional fisher among Caracarini falcons. Biota Neotropica 9(3): 403-405.

- Shumaker, R.W., K.R. Walkup and B.B. Beck. 2011. *Animal Tool Behavior: the Use and Manufacture of Tools by Animals*. Baltimore: Johns Hopkins University Press.
- Stiles, F.G. and A. F. Skutch. 1995. *Guía de Aves de Costa Rica*. Heredia: Instituto Nacional de Biodiversidad (INBio).
- The IUCN Red List of Threatened Species. Version 2018-1. (retrieved from www.iucnredlist.org on 15 November 2018).
- Van Lawick-Goodall, J. and H. Van Awick. 1966. Use of tools by Egyptian Vultures *Neophron percnopterus*. *Nature* 212: 1468–1469.

* * *

NEW LOCATIONS IN COLOMBIA FOR STYGIAN OWL (*ASIO STYGIUS*)

By Elvis Felipe Quintero Quintero¹, Jeyson Sanabria-Mejía², Angélica Magali Sogamoso Hernández¹
and Sergio Chaparro-Herrera^{3,4}

¹Asociación Aves Meta, Villavicencio, Colombia.

²Asociación SELVA: Investigación para la Conservación en el Neotrópico, Bogotá, Colombia.

³Grupo de Ecología y Evolución de Vertebrados Universidad de Antioquia, Medellín, Colombia.

⁴Grupo de Especialistas en Búhos Neotropicales.

E-mail: pipekayak22@gmail.com, jeisonsanabria@yahoo.com.mx, sergioupn@gmail.com

The Stygian Owl (*Asio stygius*) is a nocturnal bird of prey (Strigidae) that inhabits a wide variety of environments such as humid mountain forests and edges, as well as open or semi-open areas with shrubs or in areas with tall, dense trees in rural zones or in well-treed urban parks, from sea level to 3,100 m.a.s.l. In Colombia, it is found principally between 1,700 and 3,000 m.a.s.l., though occasionally, in fewer numbers, at lower elevations (Hilty and Brown 1986, ABO 2000, Chaparro-Herrera et al. 2017, Olsen et al. 2019).

The Stygian Owl has a patchy distribution from northeastern Mexico to Paraguay, northeast Argentina and southeast Brazil (König et al. 2008, Chaparro-Herrera et al. 2017, Olsen et al. 2019). In Colombia, it is found in the three mountain ranges: Western Range in Cauca (El Tambo, Popayán, Totoró) and Cauca Valley (Cali); Central Range from northern Antioquia (Anorí) to

south Nariño (IpiALES); and Eastern Range from Huila (western flank of Algeciras, San Agustín, Villavieja and Garzón) to northern Santander (Aguaclara), with isolated records in Santa Marta, La Guajira (Dibulla) and Serranía de Perijá (Hilty and Brown 1986, Biomap 2006, Ayerbe-Quiñones et al. 2008, Chaparro-Herrera et al. 2017) (Figure 1).

In continuation, we present two new locations for the Stygian Owl in Colombia, which amplify its known distribution to the north of the Western Range and east of the Colombian Andes. 1) Western Range: We observed a Stygian Owl on 24 August, 2017 in the Distrito de Manejo Integrado Agualinda, Apia Municipality, Risaralda Department (5° 7' 45.77" N, 75° 55' 42.70" W, 2,190 m.a.s.l.). The individual was perched 4 m above the ground in a *Miconia caudata* (Melastomataceae) tree, on the border of a bridlepath,

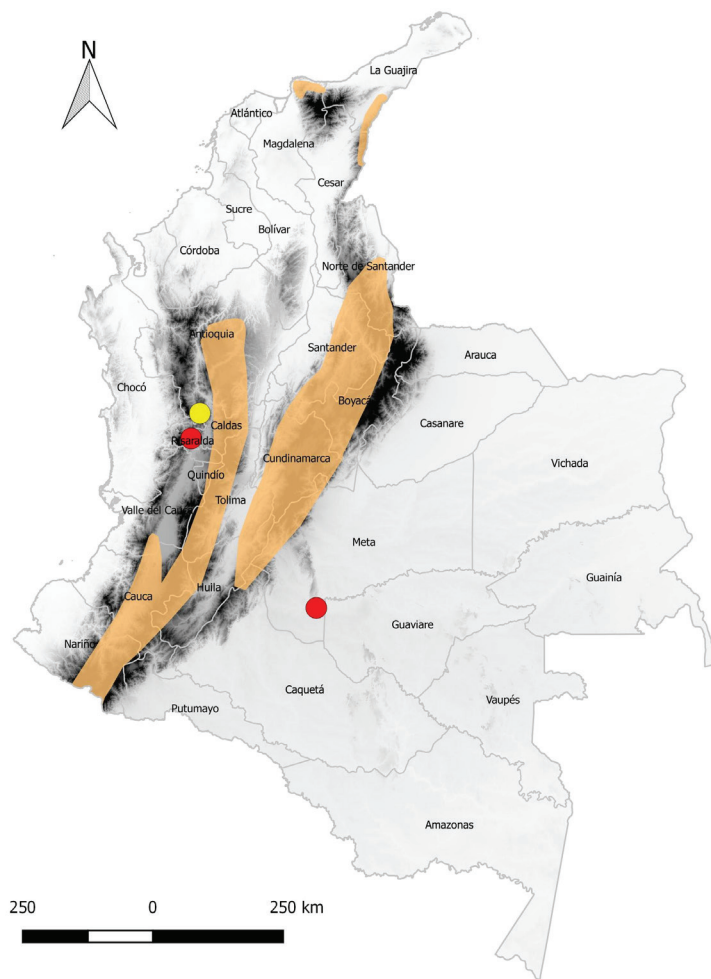


Figure 1. Distribution map of Stygian Owl (*Asio stygius*) in Colombia. Orange polygon taken from Chaparro-Herrera et al. in preparation. Yellow point: indicates location reported in Antioquia (eBird 2018). Red points indicate new locations in Risaralda and Meta (this note).

with secondary vegetation within a mountainous humid forest. When the owl noticed it was being observed, it flew into the forest. The next day, we observed a Stygian Owl in the same area. We assume it was the same individual using the area as a roosting site (Figure 2). This observation occurred at a distance of 205 linear km north of records for this species in the municipality of Cali, department of Valle del Cauca.

There is a record from 4 April, 2017 in the Loro Orejiamarillo Bird Reserve in the Jardín Municipality, Antioquia Department (eBird 2018), at a distance of 51 linear km from the record reported

in this note. This makes the observation in Risaralda the northernmost known location north of the Western Cordillera, greatly expanding the known distribution in this region for the species (Figure 1).

2) Eastern Andes: we observed an individual at 11:00h on 25 June, 2018 in the central plaza of the municipality of La Macarena, Meta Department ($2^{\circ} 11' 1.25''$ N, $73^{\circ} 47' 16.22''$ W, 236 m.a.s.l.), perched about 20 meters above the ground in a *Eriotheca globosa* (Malvaceae) tree. Over the following five consecutive days (the amount of time we stayed in this area), we ob-



Figure 2 (Left). Individual observed in Apia-Risaralda, Western Range. Photo © Jesyon Sanabria-Mejía; **Figure 3 (Right).** Individual observed in the Macarena-Meta, eastern Andes. Photo © Elvis Felipe Quintero Quintero

served two owls together. In the afternoons, they remained perched and at night we observed them entering the bell tower of the church, possibly to capture pigeons (*Columba livia*), however we never observed them with prey (Figure 3).

This record extends the species' distribution 157 linear km from the nearest town in the Eastern Cordillera located in the municipality of Algeciras, department of Huila and is the first record east of the country far removed from the eastern Andes. Despite having appropriate habitat along the Western Range, there is no information on the species' distribution and habitat use requirements. The observation of *A. stygius* in the Integrated Management District (DMI) Agualinda, which is under the protection of the Regional System of Protected Areas of the coffee axis "SIR-AP" and the Regional Autonomous Corporation

of Risaralda "CARDER", implies that there are conserved habitats in which this species can find resources such as food and shelter, as well as suitable breeding sites. However, it is less abundant in lowland areas (Chaparro-Herrera et al., 2017), so in the eastern Andes it may be more scarce naturally.

The species is not restricted to forested areas and does not seem to be affected by anthropogenic disturbances, based on our and others' observations of this species, in urban areas of the country (ABO 2000, Mejía Quintanilla and Suazo 2016, Olsen et al., 2019). Though previous studies in the western and eastern Andes have not documented this species, this may be due to its rarity in some localities and its local distribution (Hilty and Brown 1986). It could also be attributed to the fact that the species is difficult to detect, often

going unnoticed. This would suggest that the species could have a wider distribution and could be more common in Colombia than what has been recorded to date.

Referencias

ABO. 2000. Aves de la Sabana de Bogotá, guía de campo. Asociación Bogotana de Ornitología y Corporación Autónoma Regional de Cundinamarca CAR. Bogotá D. C.

Ayerbe-Quíñones, F., J. P. López-Ordoñez, M. F. González-Rojas, F. Estela, M. B. Ramírez-Burbano, J. V. Sandoval-Sierra and L. G. Gómez-Bernal. 2008. Aves del departamento del Cauca. Colombia. Biota Colombiana 9 (1):77-132.

Biomap. 2006. Base de Datos Darwin: Proyecto BioMap base de datos de distribución de la avifauna Colombiana. www.biomap.net (accedido 27 junio 2018).

Chaparro-Herrera, S., S. Córdoba-Córdoba, J. P. López-Ordoñez, J. S. Restrepo Cardona and O. Cortes-Herrera. 2017. The Owls of Colombia. Pp. 317-371. En: Enríquez, P. (ed.) Neotropical Owls Diversity and Conservation. Springer.

eBird. 2017. eBird: una base de datos en línea para la abundancia y distribución de las aves. Ithaca, NY: Cornell University. <http://ebird.org/> (accedido junio de 2018).

Hilty, S. L. and W. L. Brown. 1986. A guide to the birds of Colombia. Princeton, NJ: Princeton University Press.

König, C., F. Weick and J-H. Becking. 2008. Owls of the world. Second Edition. Christopher Helm, London.

Olsen, P. D., G. M. Kirwan and J. S. Marks. 2019. Stygian Owl (*Asio stygius*). En: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. & de Juana, E. (eds.). Handbook of the Birds of the World Alive. Lynx Edicions, Barcelona. (accedido desde <https://www.hbw.com/node/55124> el 7 enero de 2019).

Mejía-Quintanilla, D. F. and J. P. Suazo Euceda. 2016. Nuevo registro de distribución del Búho Cornudo *Asio stygius* (strigidae) para honduras. Scientia hondurensis 1(2): 75-80.

* * *

A CASE OF AGGRESSION BY *BUTEO BRACHYURUS* AGAINST *PSEUDASTUR ALBICOLLIS* (ACCIPITRIFORMES) IN SOUTHERN HUIMANGUILLO, TABASCO, MEXICO

By Saúl Sánchez Soto¹

¹Colegio de Postgraduados, Campus Tabasco. Apdo. postal 24, C.P. 86500, H. Cárdenas, Tabasco, México.

E-mail: sssoto@colpos.mx

The most common form of agonistic interaction is one in which an animal assaults its opponent, an action usually originating from competition for space, food, or other resources (Senar 1994). Among birds of prey, agonistic behaviors arise when intrusions occur between individuals, and are accentuated when species with similar ecological requirements share the same habitat (Muñoz-Gallego et al., 2015).

There are several documented cases of agonistic interactions between different species of Neotropical raptors (Farquhar et al., 1994, Jiménez 1995, Figueroa-Rojas 2003, Vargas-Masis and Ramírez 2012, Raimilla et al., 2015). In this note we document aggressive behavior by a Short-tailed Hawk (*Buteo brachyurus*) against a White Hawk (*Pseudastur albicollis*) in southeastern Mexico.

The area south of Huimanguillo, Tabasco State, Mexico (17 ° 19' 11.80 "N, 93 ° 36' 58.69" W)

is suitable for the observation of raptors due to its physiography and vegetation, which is a transition zone between the hills of southern Tabasco and the mountains of northern Chiapas.

Observation

On 13 April, 2016 at 09:27h, I observed a White Hawk ascending in a spiral over the forest located next to the northern slope of the Mono Pelado Hill. While I was photographing the White Hawk (Figure 1A), a Short-tailed Hawk appeared suddenly. It attacked the White Hawk from the left side. The White Hawk vocalized loudly at the time, facing its aggressor, which apparently helped it avoid a second attack (Figure 1B).

The White Hawk then continued its ascent (Figure 1C), while the Short-tailed Hawk moved away from the site in another direction (Figure 1D). The attack lasted a few seconds and was possibly due to competition for territory.



Figure 1. White Hawk ascending (A) and being attacked by Short-tailed Hawk (B). White Hawk (C) and Short-tailed Hawk (D) after the agonistic event. Photos © Saúl Sánchez Soto

Discussion

In southeastern Arizona, United States, Stejskal (2008) observed a Short-tailed Hawk being harassed by a Sharp-shinned Hawk (*Accipiter striatus*), and mentions that both raptors regularly hunt birds, which is why they are possibly direct competitors. Adult Short-tailed Hawks have territories of 1.9 to 2.6 km in diameter, and frequently chase Broad-winged Hawks (*Buteo platypterus*) and Red-shouldered Hawks (*Buteo lineatus*) away from their territories (Hasenjager 2008).

It is possible that the aggressive behavior of *B. brachyurus* is similar to that of the Variable Hawk

(*Buteo polysoma*), which apparently is one of the species that is most involved in attacks between Neotropical raptors (Jiménez 1995).

On the same day that I observed the interaction between *B. brachyurus* and *P. albicollis*, other species of raptors were present and photographed in the area, including a Common Black Hawk (*Buteogallus anthracinus*) which was flying in circles, a Roadside Hawk (*Rupornis magnirostris*) that was perching, a perching Gray Hawk (*Buteo plagiatus*) and a soaring Zone-tailed Hawk (*Buteo albonotatus*). I photographed the birds with a Canon Po-

wershot SX50 HS camera with 50x optical zoom, and identified them by consulting Peterson and Chalif (1989), Howell and Webb (1995) and Van Perlo (2006). It would be beneficial to make further observations at the site in order to determine the presence of other raptor species, and to increase knowledge about this group of birds in this area of southeastern Mexico.

References

Farquhar, C.C., W.S. Clark, R.G. Wright and M. Coello. 1994. First record of interspecific cartwheeling between large raptors: *Buteo poecilochrous* and *Geranoaetus melanoleucus*. J. Raptor Res. 28: 274-275.

Figueroa-Rojas, R.A. 2003. Enganche aéreo de garras entre un aguilucho andino (*Buteo albigula*) y un aguilucho común (*Buteo polyosoma*) en el centro-sur de Chile. El Hornero 18: 53-55.

Hasenjager, M. 2008. "*Buteo brachyurus*" (On-line), Animal Diversity Web. Downloaded from https://animaldiversity.org/accounts/Buteo_brachyurus/ on 17 May. 2019.

Howell, S.N.G. and S. Webb. 1995. A guide to the birds of Mexico and northern Central America. Oxford University Press. New York.

Jiménez, J.E. 1995. Historia natural del Aguilucho *Buteo polysoma*: una revisión. El Hornero 14: 1-8.

Muñoz-Gallego, A.R., R. Real-Giménez and A.L. Márquez-Moya. 2015. interacciones a escala nacional entre rapaces rupícolas en base a modelos

de distribución espacial. Los casos del buitre leonado, alimoche y águila perdicera. Downloaded from https://www.hcenergia.com/recursos/estaticos/2015_05_25/aves/files/assets/common/downloads/page0001.pdf on 19 May 2019.

Peterson, R.T. and E.L. Chalif. 1989. Aves de México. Guía de Campo. Editorial Diana. México, D.F.

Raimilla, V., T. Rivas-Fuenzalida, A. Kusch, J. Díaz, J. Toledo, A. García and J.E. Jiménez. 2015. Incidence of cartwheeling flights in raptors of South-Central Chile. The Wilson Journal of Ornithology 127: 289-297.

Senar, J.C. 1994. Vivir y convivir: La vida en grupos sociales. In: Carranza, J. (ed.). Etología. Introducción a la ciencia del comportamiento. Universidad de Extremadura. Cáceres, España.

Stejskal, D. 2008. Arizona Bird Commite. Documenting Arizona Birds. Short-tailed Hawk (*Buteo brachyurus*), Tucson, Pima County. Downloaded from http://www.azfo.org/gallery/STHA_Tucson_2008.html. on 17 May. 2019.

Van Perlo, B. 2006. Birds of Mexico and Central America. Princeton University Press. Princeton, New Jersey.

Vargas-Masís, R. and O. Ramírez. 2012. Defensa territorial de *Buteo nitidus* y *Quiscalus mexicanus* ante depredación de *Falco peregrinus* en el Valle Central de Costa Rica. Zeledonia 16: 15-24.

* * *

STREET FOOD: AN UNUSUAL RECORD OF A BROAD-WINGED HAWK (*BUTEO PLATYPTERUS*) FORAGING IN A DUNG PILE BOÑIGA

By Víctor J. Acosta-Chaves¹, Paula C. Acosta-Chaves² and Adriana P. Acosta-Chaves³

¹Carrera de Turismo Ecológico, Recinto de Paraíso, Sede Atlántico, Universidad de Costa Rica, Cartago, Costa Rica.

²San Pedro de Poás, Alajuela, Costa Rica.

³Carrera de Gestión del Recurso Hídrico, Recinto de Grecia, Sede Occidente, Universidad de Costa Rica, Alajuela, Costa Rica.

E-mail: victor.acosta@ucr.ac.cr, paoac19@hotmail.com, adriana.acostachaves@ucr.ac.cr

Neotropical forests have been extensively fragmented by human activities. In fact, roads have been one of the main modifiers of the landscape (Monge-Nájera 1996, Rojas-Chacón 2010) as well as the behavior of wildlife worldwide (Nihei and Higuchi 2001). While roads and highways near forested areas (even secondary roads) cause a high mortality among organisms (Rojas-Chacón 2010), certain raptors and scavengers have been able to use roads to their favor (Meunier et al., 1999). Several species of diurnal raptors have been documented as common on roadsides and roads because they are favorable sites for finding prey or carrion (Meunier et al., 1999).

The Broad-winged Hawk (*Buteo platypterus*) is one of the most common migratory raptors in Costa Rica from September to April, where it prefers fragmented landscapes and roadsides to hunt amphibians, reptiles, small mammals and

other birds (Stiles and Skutch 1989). Though its nesting and dietary habits are known in North America (Rusch and Doerr 1972, Fitch 1974), little has been published about its natural history in the Neotropics.

In this note we report some unusual behavior exhibited by a juvenile Broad-winged Hawk in an agro-landscape of San Rafael de Vara Blanca, Province of Heredia, Costa Rica (10 ° 10' 54.1" N, 84 ° 09 ' 02.5" W, datum WGS84; ~ 1,800 m.a.s.l.). The area of Vara Blanca encompasses important fragments of lower montane forest, gallery forest and pastures dedicated especially to dairy farming. On 27 January 2019 we were birding and exploring the area by car. At 14:00h., we spotted a young Broad-winged Hawk on the bare branch of a low tree. The raptor flew to a nearby tree as we drove by. At 14:45h, we returned along the same road and spotted the hawk



Figure 1. Juvenile Broad-winged Hawk foraging for arthropods in cow dung previously smashed by a vehicle in Vara Blanca, Costa Rica. Photo © Víctor Acosta-Chaves

on the ground on recently crushed cow dung. We stopped the vehicle a few meters away. We were able to observe the hawk feeding on some type of arthropod (potentially dung beetles) that it removed from the dung with its beak. We hypothesized that the arthropods had also been crushed within the dung a few minutes earlier, and was seen as a feeding opportunity by the juvenile raptor (Figure 1).

Due to the curved, foggy and narrow road at the site and time of observation, we had to move the vehicle after a couple of minutes of observation. This caused the hawk to fly towards a nearby tree.

We were surprised that in spite of our relatively close presence, the hawk remained at the site, showing potential interest in the previously abandoned dung (Figure 2).

We consider this observation important because it documents a previously unpublished behavior for juveniles of this species, although it is common among other Buteos around the world to use roads to forage (Meunier et al., 1999). It is well known that certain raptor species feed on roadkill (Meunier et al., 1999). Even other birds, such as carrion crows (*Corvus corone*) have been documented using cars as nutcrackers in several



Figure 2. Despite having flown into a nearby tree because of our approach in a vehicle, the young hawk still showed interest in continuing to forage near the dung pile. Photo © Víctor Acosta-Chaves

temperate countries (Nihei and Higuchi 2001). Additionally, foraging for beetles in dung is a common and important source of food for other diurnal raptors (Young 2015). Even the Burrowing Owl (*Athene cunicularia*) uses dung as bait to attract insects to its burrow (Levey et al., 2004).

In the case of juvenile birds that are still perfecting their hunting strategies, occasionally taking advantage of dung as a source of insects, and cars as tools to obtain them, would be a good adapta-

tion to peri-urban environments where the density of vehicles is low but does provide those opportunities. Even for much larger raptors (e.g., *Spizaetus ornatus*) considered to be forest predators, scavenging or opportunistic behaviors have been documented (Idris Jones and Dorward 2014).

While we cannot confirm that the Broad-winged Hawk takes as much advantage of vehicles as some urban crows do, it is possible that it occasionally feeds from the crushed dung in the streets of Vara Blanca, because it is an area rich in cattle and horses.

However, there is a drawback to this. Taking advantage of roadkill on streets or roads with greater traffic could also be the cause of mortality for raptors and other scavengers – a common occurrence in Costa Rica (Monge-Nájera 1996, Rojas-Chacón 2010). We recommend that people driving on secondary roads in Vara Blanca de Heredia drive slowly and use good lighting under misty conditions, in order to avoid running over these and other animals in the area.

References

- Fitch, H. S. 1974. Observations on the food and nesting of the Broad-winged Hawk (*Buteo platypterus*) in northeastern Kansas. *The Condor*, 76(3), 331-333.
- Idris Jones, S. E., and Dorward, L. J. 2014. Possible scavenging behavior in Ornate Hawk-Eagle

- (*Spizaetus ornatus*) in Amazonas, Brazil. *Revista Brasileira de Ornitologia*, 22(1), 27-31.
- Levey, D. J., Duncan, R. S., and Levins, C. F. 2004. Animal behaviour: use of dung as a tool by burrowing owls. *Nature*, 431(7004), 39.
- Meunier, F. D., Verheyden, C., and Jouventin, P. 2000. Use of roadsides by diurnal raptors in agricultural landscapes. *Biological Conservation*, 92(3), 291-298.
- Monge-Nájera, J. 1996. Vertebrate mortality on tropical highways: the Costa Rican case. *Vida Silvestre Neotropical.*, 5(2), 154-156.
- Nihei, Y., and Higuchi, H. 2001. When and where did crows learn to use automobiles as nut-crackers. *Tohoku psychological folia*, 60, 93-97.
- Rojas Chacón, E. 2011. Atropello de vertebrados en una carretera secundaria en Costa Rica. *UNED Research Journal/Cuadernos de Investigación UNED*, 3(1).
- Rusch, D. H., and Doerr, P. D. 1972. Broad-winged hawk nesting and food habits. *The Auk*, 89 (1), 139-145.
- Stiles, F. G., and Skutch, A. F. 1989. *Guide to the birds of Costa Rica*. Comistock.
- Young, O. P. 2015. Predation on dung beetles (Coleoptera: Scarabaeidae): a literature review. *Transactions of the American Entomological Society*, 111-155.

* * *

NEW RECORD OF APLOMADO FALCON (*FALCO FEMORALIS*) IN CENTRAL MEXICO

By Carlos A. Cruz González¹ and Daniela Medellín Alvarado¹

¹Instituto de Ecología, Universidad Nacional Autónoma de México, Ciudad Universitaria. Apartado Postal 70-275, 04510 México, D.F., México. Email: carloscga72@hotmail.com

The Aplomado Falcon (*Falco femoralis*) is a widely distributed species on the American continent. Of the three recognized sub-species, *F. f. femoralis*, *F. f. pichinchae*, and *F. f. septentrionalis*, the latter is the only one found in Mexico. Its range extends from the southern United States (Arizona, New Mexico, Texas) and Mexico, into Guatemala, Belize, and Nicaragua (AOU 1998, Clark and Wheeler 2001).

In Mexico, the Aplomado Falcon was once widely distributed. However, its populations have been reduced and it currently has an allopatric distribution in the highlands north of Chihuahua, southeast along the coastal plain of the Gulf of Mexico, from Tamaulipas through Veracruz, Tabasco, and Chiapas to Campeche. (AOU 1998, Howell and Webb, 1995).

Under Mexican law, this species is considered “subject to special protection” (Semarnat 2002). Throughout its distribution, the Aplomado Falcon is associated with grassland habitats, open

land in tropical areas, coastal scrub, and savannah short grass ranging from lowlands at sea level to 4,400 m.a.s.l.

Observations

While on a casual bird watching trip in the Xaltocan municipality (19° 45 ' 22.54" N, 99° 1' 34.25" W, with an elevation of 2,247 m.a.s.l.), Mexico State, Mexico, we observed, photographed, and captured a juvenile female Aplomado Falcon on 18 August, 2014. (Figure 1). We captured this individual using a “bal-chatri” trap (Berger and Mueller 1959) with a House Sparrow (*Passer domesticus*) as bait. After photographing the individual, and without measuring or weighing her, we released the falcon in the same area in which she had been captured. It is important to note that this record is outside the current and historical distribution range for the species (Bird-life 2018).

Prior to this observation, on 28 March, 2014, a juvenile male Aplomado Falcon was observed



Figure 1. Freshly trapped Aplomado Falcon.
Photo © Salvador Fuentes

perched on a boundary post in the same location. No coordinates or photographs were taken. The falcon was observed during a period of approximately 30 minutes, while it was displaying hunting behavior. It was seen repeatedly chasing after meadowlarks (*Sturnella spp*), and returning to the same perch after every unsuccessful hunting attempt. Residents in the area also reported that this falcon species has been observed recently in the zone and, on occasion, in groups of up to three individuals (pers. comm.).

Both individuals observed by the authors were identified as juveniles because of the color patterns on their feathers, and the color of their cere and talons. We believe that the uncaptured individual was a male because of its apparent size (1/3 smaller than the female). Sizes were estimated both while the individual was perched and in flight (Howell and Webb 1995).

The habitat in the area is grassland with abundant water sources. Some dominant plant species are of the genus: *Leptochloa*, *Andropogon*, *Lycurus*, *Digitaria*, and *Distichlis*, among others, as well as crops of corn and wheat. The area is apparently protected due to its proximity to a military air-base, which is a federal area where human settlements and activities are prohibited. The habitat has abundant potential prey, according to Montoya (1997), and Macias-Duarte (2004), such as Curve-billed Thrasher (*Toxostoma curvirostre*), Common Nighthawk (*Chordeiles minor*), Brown-headed Cowbird (*Molothrus ater*), Mourning Dove (*Zenaida macroura*), sparrows of the family *Emberizidae*, Virginia Rail (*Rallus limicola*) Vermillion Flycatcher (*Pyrocephalus rubinus*), Canyon Towhee (*Pipilo fuscus*), Red-winged Blackbird (*Agelaius phoeniceus*), Great-tailed Grackle (*Quiscalus mexicanus*), and meadowlarks (*Sturnella spp*), among others.

Sánchez-González (2013) considers a record to be new when there is at least one of the following situations: 1) it is the first record of the taxon in a given political territory and the species is added to the species list or inventory of said territory or state, 2) a taxon is recorded in a different biotic region, or 3) the taxon is recorded in a study site included in potential distribution maps but there is a lack of published data that confirms it.

Because of these criteria, we consider this record to be the first of *F. Femoralis* for the State of Mex-

ico. To meet the second criteria, we consulted the biogeographic regions map of Mexico, (CONABIO 1997) and found that in comparison with the IUCN (2018) distribution map for the species, our observations occurred in a different region of the known populations in Northern and Eastern Mexico.

In addition, we consulted the potential distribution map for the Aplomado Falcon in Mexico, (Navarro and Peterson 2007) which considers the State of Mexico as a potential year-round site for this species, so this record confirms the model generated by CONABIO.

These observations and the capture of one individual may suggest that Aplomado Falcons may make latitudinal movements (migratory) and be increasing their known distributional range, or that there is a lack of study on potential habitats for this species.

We recommend carrying out a census in the area to locate potential biological corridors, which may link the site where the falcons were reported, and the known populations in Eastern Mexico.

Acknowledgements

I thank Salvador Fuentes for helping with the capture of the falcon and the photographs of this individual.

References

- American Ornithologists' Union. 1998. Check-list of North American Birds. 7th ed. American Ornithologists' Union. Washington D. C. 877 pp.
- Berger D. and H. Muellert, 1959. The Bal-Chatri: A trap for the birds of prey. Association of Field Ornithologists 30: 18-26.
- Birdlife International. 2018. *Falco femoralis*. The IUCN Red List of Threatened Species 2018: e.T22696450A131940332. <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22696450A131940332.en>
- Clark, W. S. and B.K. Wheeler. 2001. The Peterson A field guides to Hawks of North America 2nd edition.
- CONABIO. 1997. Provincias biogeográficas de México, escala 1:4000000. Comisión Nacional para el Conocimiento y Uso de la Biodiversidad.
- Howell, S. N. G. and S. Webb. 1995. A guide to the birds of Mexico and Northern Central America. Oxford University Press. New York. 851 pp.
- Macias-Duarte. 2004. Reproduction, Prey, and habitat of the Aplomado Falcon (*Falco femoralis*) in desert grasslands of Chihuahua, México, The Auk, 4: 1081-1093.

Montoya, A., 1997. Breeding biology of Aplomado Falcons in desert grasslands of Chihuahua México. *Journal of Field Ornithology* 68: 135-143.

Mota-Vagas, C. and O.R. Rojas-Soto. 2012. The importance of defining the geographic distribution of species for conservation: the case of the Bearded Wood-Partridge. *Journal for Nature Conservation* 20:10-17.

Navarro, A.G. and A.T. Peterson (on line). 2007. “*Falco Femoralis* (Halcón Fajado). Residencia Permanente Distribución potencial”. In: “Mapas de las aves de México” Zoology Museum, Facultad de Ciencias, UNAM and University of Kansas, Museum of Natural History. Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO). México, DF. <www.conabio.gob.mx/informacion/gis/> (consulted June 22, 2015).

Sánchez-González, L.A. 2013. Cuando un “nuevo registro” es realmente un nuevo registro: consideraciones para su publicación. *HUITZIL* 1:17-21.

Semarnat. 2010. Norma Oficial Mexicana NOM-059-SEMARNAT-2010, Protección ambiental-Especies nativas de México de flora y fauna silvestres-Categorías de riesgo y especificaciones para su inclusión, exclusión o cambio-Lista de especies en riesgo. Diario oficial de la federación.

* * *

OF INTEREST...

Conferences

Annual Meeting of the Raptor Research Foundation & Neotropical Raptor Network Conference

4-8 October 2020, Boise, Idaho, USA

www.raptorresearchfoundation.org/conferences/upcoming-conferences/

The year 2020 is just around the corner and The Peregrine Fund is excited to host you at the 2020 Annual Meeting of the Raptor Research Foundation and the Neotropical Raptor Network! The Peregrine Fund will be celebrating its 50th Anniversary that year and is working to make RRF2020 a true celebration of raptor science and conservation.

Conference hosts include The Peregrine Fund, Boise State University, Intermountain Bird Observatory, Golden Eagle Audubon, and USGS Idaho. Conference co-chairs are Sarah Schulwitz, Director of the American Kestrel Partnership, and Rick Watson, President and CEO of The Peregrine Fund. For any questions please contact Sarah at Schulwitz.Sarah@peregrinefund.org or Marta at mcurti@peregrinefund.org

Grants

Chicago Zoological Society Chicago Board of Trade Endangered Species Fund

<https://www.czs.org/Chicago-Zoological-Society/Conservation-Leadership/CBOT-Endangered-Species-Fund>

The Chicago Zoological Society administers the Chicago Board of Trade (CBOT) Endangered Species Fund and is now accepting new proposals for the 2019 Fall funding cycle. Projects should focus on conservation and research of specific threatened, vulnerable, or endangered species, or a specific habitat that is of high biological value or that is substantially threatened (IUCN Red List). This includes projects that will quantitatively assess population and environmental status with indications of best conservation strategy and projects that will help achieve sustainable relations between local people and the species of concern. The development of educational projects and training that assist in building local conservation capacity are given higher priority.

Each applicant must submit an **initial Grant Inquiry in English**. These are due on **June 28, 2019** and should be submitted via email to CBOT@CZS.org.



Red de Rapaces Neotropicales
www.neotropicalraptors.org

Issue 27, June 2019

