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BIMONTHLY BULLETIN of the CAYMAN ISLANDS
DEPARTMENT of ENVIRONMENT 'S
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Beetles -Up Close & Personal
Best Bird Practices
The Invasion of Brazilian Pepper
Know Your Natives



CAYMAN ISLANDS
DEPT of ENVIRONMENT

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Beetles –up close and personal

By Alan Walker

One day last January, my wife and I were having lunch on the porch at the Hungry Iguana on Little Cayman and chatting with our friend, Johnny Johnson. “I’ve got something interesting to show you” Johnny said.

Johnny is a long-time resident of Little Cayman and is keenly interested in the natural history of our island. He produced a huge, dead black beetle about 2 ¼” long (about 55 mm), not counting its antennae (see below), that he had found on the strandline along the south shore. Since he’d never seen anything like it before, he recognized that it might be important.

Having seen similar beetles when I lived in Africa, I knew this was a member of the prionine family of longicorn beetles.

Longicorns are named for their very long antennae, which swivel in a ball and socket joint just in front of their compound eyes. Johnny’s beetle was a male with two large, hook-like mandibles or jaws protruding from its head. The males use these appendages for sparring with other males, just as the better-known European stag beetles do. In general, longicorn beetles are wood borers and spend most of their lives as larvae or grubs that eat wood. The adults eat very little during their short, sexual lives before the females lay their eggs on or under tree bark. They can be a very expensive pest of timber plantations.

Trying to identify Johnny’s beetle precisely was more difficult. I turned to the publications of the joint Cayman Islands / Royal Society expedition to



The beetle shows its impressive size when displayed next to a ruler. Photos by Alan Walker.

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Little Cayman in 1975, which surveyed the natural history of the island. To our surprise, the entomologist on that expedition, Dr. Richard Askew, found that longicorn beetles were relatively common on the Caymans, with 9 different species found on Little Cayman alone.

All the prionines known from that expedition were much smaller than Johnny's specimen, though Askew reported finding "an enormous prionine over 60 mm long" on Grand Cayman.

I sent photographs of the animal to Dr. Max Barclay, curator of beetles at the Natural History Museum in London, who was interested in the specimen and took care of Dr. Askew's beetles from the Cayman Islands / Royal Society Expedition.

The DOE gave me permission to take the specimen to the Natural History Museum for his expert examination. First I took the specimen home to the US. For safety and proper documentation, I asked Dr. Tim Ryan of the Center for Quantitative Imaging at Penn State University to take high resolution CT scans of the beetle.

These machines work like medical CT scanners, taking a series of X-ray "slices" (images) through an object without touching it. These slices can then be reconstructed in a computer to produce detailed 3-D images of the object. The radiation doses needed to image features as small as 2/1000 of a millimeter are dangerous for living patients, so medical scanners are much cruder, though the radiation can't hurt a dead beetle. Tim kindly scanned the specimen for me and produced the spectacular false-colour images here.

From my original snapshots, Dr. Barclay thought that this beetle might be the first record from the Sister Islands of *Stenodontes chevrolati* Gahan, known from the Bahamas, Cuba, and Florida. The few specimens of that species from the Caymans are all from Grand Cayman.

Now that he has the specimen and the scans, we are waiting anxiously for a more detailed report from Dr. Barclay, which will tell us exactly what this wonderful creature is. Because Little Cayman is so isolated geographically, it might be an entirely new species. It goes to show that observant amateurs can play an important role in scientific discoveries.

Best Bird Practices

The [American Birding Association \(ABA\)](http://www.aba.org) is a non-profit organization that provides leadership to birders by increasing their knowledge, skills, and enjoyment of birding. As the only organization in North America that specifically caters to recreational birders, the ABA also contributes to bird and bird habitat conservation through several conservation programs. The ABA has published a Code of Ethics guideline to help people interested in watching birds get the most out of their experience while also not disturbing the unique wildlife. Enjoy and feel free to share! Please acknowledge the role of ABA in developing and promoting this code with a link to the ABA website: <http://www.aba.org>.

Everyone who enjoys birds and birding must always respect wildlife, its environment, and the rights of others. In any conflict of interest between birds and birders, the welfare of the birds and their environment comes first.

Code of Birding Ethics

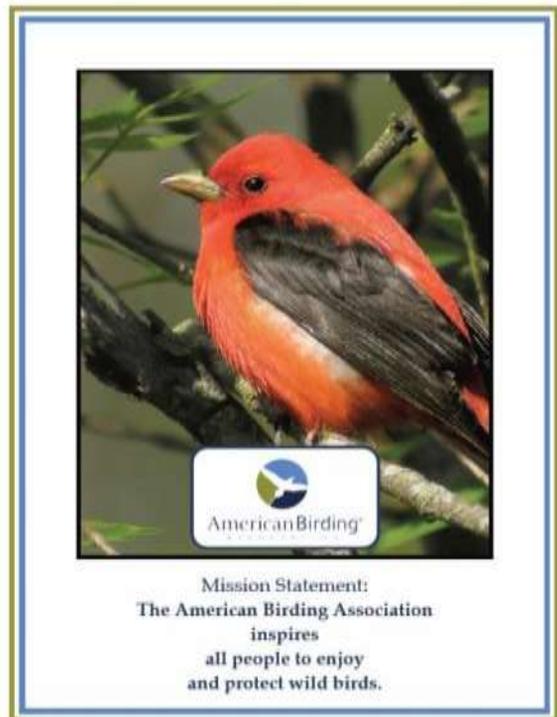
1. Promote the welfare of birds and their environment.

1(a) Support the protection of important bird habitat.

1(b) To avoid stressing birds or exposing them to danger, exercise restraint and caution during observation, photography, sound recording, or filming.

Limit the use of recordings and other methods of attracting birds, and never use such methods in heavily birded areas, or for attracting any species that is Threatened, Endangered, or of Special Concern, or is rare in your local area.

Keep well back from nests and nesting colonies, roosts, display areas, and important feeding sites. In such sensitive areas, if there is a need for extended observation, photography, filming, or recording, try to use a blind or hide, and take advantage of natural cover. Use artificial light sparingly for filming or photography, especially for close-ups.



The American Birding Association's Code of Ethics guideline can be [downloaded here](http://www.aba.org). Please feel free to reproduce, distribute and teach it to others. Please acknowledge the role of ABA in developing and promoting this code with a link to the ABA website: <http://www.aba.org>.

1(c) Before advertising the presence of a rare bird, evaluate the potential for disturbance to the bird, its surroundings, and other people in the area, and proceed only if access can be controlled, disturbance minimized, and permission has been obtained from private land-owners.

The sites of rare nesting birds should be divulged only to the proper conservation authorities.

1(d) Stay on roads, trails, and paths where they exist; otherwise keep habitat disturbance to a minimum.

2. Respect the law, and the rights of others.

2(a) Do not enter private property without the owner's explicit permission.

2(b) Follow all laws, rules, and

regulations governing use of roads and public areas, both at home and abroad.

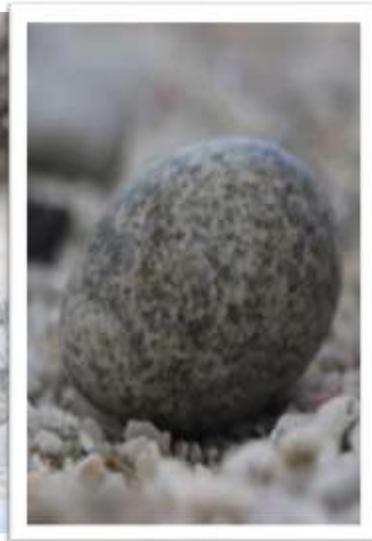
2(c) Practice common courtesy in contacts with other people. Your exemplary behavior will generate goodwill with birders and non-birders alike.

3. Ensure that feeders, nest structures, and other artificial bird environments are safe.

3(a) Keep dispensers, water, and food clean, and free of decay or disease. It is important to feed birds continually during harsh weather.

3(b) Maintain and clean nest structures regularly.

3(c) If you are attracting birds to an area, ensure the birds are not exposed to predation from cats and other domestic animals, or artificial hazards.



Being a ground nesting bird, the nightjar renders itself particularly vulnerable to people; take care not to step on eggs if a nightjar is seen flying off the ground. Photos by Jessica Harvey.

4. Group birding, whether organized or impromptu, requires special care.

Each individual in the group, in addition to the obligations spelled out in Items #1 and #2, has responsibilities as a Group Member.

4(a) Respect the interests, rights, and skills of fellow birders, as well as people participating in other legitimate outdoor activities. Freely share your knowledge and experience, except where code 1(c) applies. Be especially helpful to beginning birders.

4(b) If you witness unethical birding behavior, assess the situation, and intervene if you think it prudent. When interceding, inform the person(s) of the inappropriate action, and attempt, within reason, to have it stopped. If the behavior continues, document it, and notify appropriate individuals or organizations.



**Red-footed booby flying over Little Cayman.
Photo by Jessica Harvey.**

Group Leader Responsibilities [amateur and professional trips and tours].

4(c) Be an exemplary ethical role model for the group. Teach through word and example.

4(d) Keep groups to a size that limits impact on the environment, and does not interfere with others using the same area.

4(e) Ensure everyone in the group knows of and practices this code.

4(f) Learn and inform the group of any special circumstances applicable to the areas being visited (e.g. no tape recorders allowed).

4(g) Acknowledge that professional tour companies bear a special responsibility to place the welfare of birds and the benefits of public knowledge ahead of the company's commercial interests. Ideally, leaders should keep track of tour sightings, document unusual occurrences, and submit records to appropriate organizations.

Please Follow this Code and Distribute and Teach it to Others.

The American Birding Association's Code of Birding Ethics may be freely reproduced for distribution / dissemination. Please acknowledge the role of ABA in developing and promoting this code with a link to the ABA website using the url: <http://www.aba.org>.

Thank you.

The Invasion of Brazilian Pepper on Cayman Brac

A few of you may remember an article in a 2009 issue of Flicker written by Kristan Godbeer describing the problem of the invasive Brazilian Pepper (*Schinus terebinthifolius*) on Cayman Brac.

Earlier last month the National Trust and Joanne Ross brought Dr. Paul Berry, Professor of Ecology and Evolutionary Biology from the University of Michigan to Cayman Brac to investigate some of the island's endemic and rare plant species.

While the trip proved very productive the team also reported a spread of the invasive Brazilian Pepper. This shrub or small tree has proven highly invasive, a major threat to native plants and its trade has been prohibited in many regions.

Most likely introduced to the Brac as an ornamental plant, it can now be found in lowland wet areas, particularly in the south-western parts of Cayman Brac. In 2009, the DoE teamed up with Public Works and uprooted and burnt 4 m. tall specimens from the quarry, however, a fair number of plants have now been found along the eastern end of Valerie Road, on the western side of Salt Water Pond.

Similar to the more familiar Maiden Plum (*Comocladia dentata*), the aromatic sap of the Brazilian Pepper can cause skin irritations and its

pollen can lead to respiratory irritation. Please therefore be very careful around this plant and avoid handling it as its seeds spread easily.

The DoE will revisit this serious issue and any reports of this plant are greatly appreciated:

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Brazilian Pepper is easily recognized by its red berries and compound leaves.
[For more information -click here.](#)



KNOW YOUR NATIVES

Mahogany

West Indian Mahogany (*Swietenia mahagoni*), is a majestic hardwood tree found on all three of the Cayman Islands. It is listed as [endangered on the IUCN Red List](#) due to over-exploitation.

Growing up to 10 m. tall (~ 33 ft.), mahogany is typically found in rocky woodlands and historically large trees could reach a trunk diameter of over 1 m. (~ 3 ft. 3 in.). Mahogany is easily recognized by its leaves of up to 15 cm. (~ 6 in.) mostly in 4 pairs and its brown seeds of ca. 6 cm (2.4 in.).

Being the first type of mahogany to find its way to the European markets 5

centuries ago for boat and furniture building, it is one of the most commercially exploited species of tree. Not surprisingly, most large trees in the Cayman Islands have been cut down and generally only small specimens remain. Globally the species is experiencing some genetic erosion and is listed as a CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) II species.

It is a very attractive tree, suitable for landscaping as, with all other native trees, it is easy and cheap to maintain. It is hardy, it sustains the local climate and supports native wildlife.



Mahogany leaves, seed and full tree in the QEII BP. Photos by Mat Cottam.