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FOOD HABITS OF NORTHERN BAHAMIAN ROCK IGUANAS (*CYCLURA CYCHLURA*) IN THE EXUMA ISLANDS, WITH A DIETARY REVIEW OF ROCK IGUANAS (GENUS *CYCLURA*)

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***Abstract.*—This study examined the natural diet of Northern Bahamian Rock Iguanas (*Cyclura cychlura*) in the Exuma Islands. The diet of *Cyclura cychlura* in the Exumas, based on fecal samples (scat), encompassed 74 food items, mainly plants but also animal matter, algae, soil, and rocks. This diet can be characterized overall as diverse. However, within this otherwise broad diet, only nine plant species occurred in more than 5% of the samples, indicating that the iguanas concentrate feeding on a relatively narrow core diet. These nine core foods were widely represented in the samples across years, seasons, and islands. A greater variety of plants were consumed in the dry season than in the wet season. There were significant differences in parts of plants eaten in dry season versus wet season for six of the nine core plants. Animal matter occurred in nearly 7% of samples. Supported by observations of active hunting, this result suggests that consumption of animal matter may be more important than previously appreciated. A synthesis of published information on food habits suggests that these results apply generally to all extant *Cyclura* species, although differing in composition of core and overall diets.**

Key Words.—Bahamas; Caribbean; carnivory; diet; herbivory; predation; West Indian Rock Iguanas

INTRODUCTION

Northern Bahamian Rock Iguanas (*Cyclura cychlura*) are one of 10 extant species of rock iguanas distributed on islands in the West Indies. Listed as Vulnerable by the IUCN Red List of Threatened Species, Northern Bahamian Rock Iguanas occur only on the islands of the Exumas and Andros, both in The Bahamas (Knapp et al. 2004). Two subspecies are described from the Exumas, *Cyclura cychlura inornata* and *Cyclura cychlura figginsi*. In the Exumas, *Cyclura cychlura* is confined to a limited number of small islands. As a group, rock iguanas are among the most endangered lizards in the world owing to diminished and degraded habitat, introduced species, hunting and poaching, and perhaps tourism (Alberts 2000; Hines 2011; Lemm and Alberts 2012). Historically they were the largest terrestrial vertebrate on their islands, have been considered to be almost entirely herbivorous, and likely function in seed dispersal of some of the plants they consume (Iverson 1982, 1985).

As is the case for most other *Cyclura* species, the natural diet of *Cyclura cychlura* in the Exumas remains poorly known, despite conservation concerns arising from potentially negative effects of their being fed by tourists (James et al. 2006; Hines 2011; Knapp et al. 2013). Viewing and feeding these iguanas have become significant tourist activities in The Bahamas and several companies provide visitation opportunities on a few of the islands. I previously compared food eaten at places where these iguanas were being artificially provisioned versus food eaten in unaffected areas on the same island, finding differences in both diet and behavior (Hines 2011). Physiological effects from food provisioning, such as elevated glucose and uric acid levels, have also been suggested (James et al. 2006; Knapp et al. 2013). However, a comprehensive understanding of the natural food habits of these iguanas is lacking and is desirable both to characterize habitat needs of this vulnerable species and to fully assess alterations in the diet and potential effects of tourist activities. The primary goal of this paper is to characterize the overall natural diet of *Cyclura cychlura* in the Exumas.

In addition, I provide a synthesis of documented diets for several *Cyclura* species for which information exists, including the *Cyclura cychlura* data reported in this study. Food habits of rock iguanas have been studied to varying degrees over the past several decades. *Cyclura carinata* from the Turks and Caicos is the most comprehensively examined (Iverson 1979; Auffenberg 1982), others far less so. Although some summarization of existing diet information has been done (e.g., Iverson 1979; Lemm and Alberts 2012), similarities and differences in their diets have not been comprehensively compared.

METHODS

Study site.—I studied the food habits of *Cyclura cychlura* in the Exuma Island chain of The Bahamas on 15 islands within the natural range of the species. All islands in the study share the same geology, plant

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species richness and diversity (Knapp et al. 2013), and climate (see Iverson et al. 2004 for detailed description of two of the study islands). Situated in the Great Bahama Bank along the Exuma Sound, these islands are characterized by an exposed limestone shoreline, punctuated by sand beaches on some islands. Coastal shoreline vegetation transitions into mixed hardwood forest (locally called coppice) within the islands' interior, where sand and rock are interspersed. The islands studied are each only a few hectares in size and are uninhabited by human residents. Roughly one-third of the 15 islands studied are visited regularly by tourists, some of whom feed the iguanas, but feeding activities are limited to landing beaches (Hines 2011). The climate is seasonal; the cooler dry season occurring November–April and the warmer wet season May–October (Sealey 2006).

***Diet of* Cyclura cychlura *in the Exumas.*—**The overall diet of *Cyclura cychlura* in the Exumas was studied through examination of fecal (scat) samples. This non-intrusive method was used because the vulnerable status of the species precluded sacrificing individuals for stomach content analysis, and in my prior testing, stomach flushing of both *Cyclura cychlura* and Green Iguanas (*Iguana iguana*) proved ineffective. Although fecal (scat) analysis presents limitations due to differential digestion, particularly under-representing soft food items such as fungi and soft-bodied insects, scat analysis has been found in *Cyclura* to be nearly as reliable as stomach analysis for determining food species eaten and their frequency of occurrence (Iverson 1979; Auffenberg 1982).

To assess the overall diet and to capture the full array of natural dietary components, samples were collected over multiple islands, years and months to the extent allowed by logistical difficulties posed by the remote location. For all analyses samples were pooled across years and islands. Geographic sampling bias is unexpected given the uniformity of geology and vegetative composition of the different islands (see Study site above), and sampling years and seasons were within normal ranges for temperature, rainfall, and storms (Sealey 2006). Scat samples were collected during six years, between 2006 through 2013, from 15 islands across the entire range of *Cyclura cychlura* in the Exumas (Appendix 1). Samples analyzed were collected from ten islands in March, April, and July of 2006; five islands in June and July of 2007; six islands in March and May of 2008; six islands in July of 2009; seven islands in March, April, and May of 2010; and eight islands in January 2013. Samples were collected from natural areas of each island, avoiding landing beaches visited by tourists. All samples were uniformly dried and dissected into their distinct components. Each food item was categorized, such as fruit, leaf, flower, feather, etc., and identified to species if possible. The overall diet was evaluated using frequency of occurrence and dry mass. To assess frequency of occurrence, presence and/or absence of dietary components was recorded for 405 samples. Dry mass composition of the overall diet was determined from a subset of 113 samples drawn from 12 islands and five years of the study (Appendix 1). Mass of dietary components was measured using a S213 Veritas Precision Balance (Hogentogler & Co., Columbia, Maryland, USA).

To assess dietary differences between wet season and dry season, frequency of occurrence of plant species and other dietary components was compared (n = 405) using a pairwise chi-square test. Differences in the wet season versus dry season use of plant parts (leaves, fruit, flowers) were further evaluated for plants occurring in greater than 5% of scat samples (where a natural break in the data existed both for frequency of occurrence and dry mass measures; see Tables 1 and 2), using pairwise chi-square tests with a Holms-Bonferroni correction. Scientific and English names of plants identified in this study followed Correll and Correll (1996).

***Review of diet in* Cyclura**.—To compare and contrast diet among the *Cyclura* species, available information in the literature was synthesized, including results reported in the present study for *Cyclura cychlura*. Sources ranged from extensive dietary studies (e.g., Iverson 1979; Auffenberg 1982) to natural history notes in species accounts (e.g., Schwartz and Henderson 1991; Vogel 2000) and popular narratives (e.g., Burton 2010), for a total of 29 referenced sources. Where identifiable, foods were excluded that were associated with people, such as tourist feeding and non-native plants. Data were tallied by iguana species (combining any data for subspecies, including the three subspecies of *Cyclura cychlura*), by plant species (combining records of various plant parts), and by animal higher taxon (combining lower level taxonomic identifications). Because of the divergence of methods, sampling effort, and reporting used by different authors, the data were simply evaluated for presence/absence. Species names are those used in the original literature. Iguana scientific and common names are based on the Checklist of the Iguanas of the World (ITWG this volume).

RESULTS

Diet of* Cyclura cychlura *in the Exumas.—Pooling all data across islands and sampling visits, 74 different items were recorded in scat samples from *Cyclura cychlura* in the Exumas (Appendix 2). Samples contained between 1–12 unique food items each, with a mean of 2.76 items per sample. Of the 74 food items, 54 were identifiable plant species. Seven plant species had a frequency of occurrence of greater than 5% – *Casasia*

clusiifolia, *Conocarpus erectus*, *Rhachicallis americana*, *Manilkara bahamamensis*, *Guaiacum sanctum*, *Suriana maritima*, and *Jacquinia keyensis*. Each of these plants was observed in the diet on at least 60% of the islands and in at least five of the six years of the study (Appendix 2). Nearly 6% of the samples contained plant material that was too fragmented for accurate identification. Animal prey occurred in 6.95% of the samples, with iguana skin (2.17%), bird remains (1.45%), and *Cerion incanum* snails (1.45%) being most pervasive. One bird remains was identifiable as *Columbina passerina*, and six other animal species were identifiable. Other items included soil, seaweed, charcoal, and rocks. Of these, only soil appeared regularly (3.86% of total samples and in more than half of the islands and years).

Relative contribution of food items to the diet, based on percentage of total dry mass (n = 113), revealed that seven plant species accounted for 5% or more of the total mass (Appendix 3). *Conocarpus erectus* made the greatest contribution (17%). *Casasia clusiifolia* (15%) was the only other item to account for more than 10% of the total mass. Unidentified plant parts constituted just over 5% of the total mass. Undigested animal prey remains accounted for 1.4% of total mass and soil for 2.8%.

Combining the findings of the two analyses, only nine plants had a frequency of occurrence and/or dry mass dietary contribution of greater than 5%. This core diet was further analyzed for seasonality in the consumption of these plants and their parts (Appendix 4). Consumption of seven plant parts from six of these core plants varied significantly between seasons. *Casasia clusiifolia* fruit and leaves were eaten more in the dry season, as were *Coccothrinax argentata* fruit, and *Jacquinia keyensis* and *Guaiacum sanctum* leaves. *Manilkara bahamensis* flowers and *Conocarpus erectus* fruit were eaten more in the wet season. Overall, the diversity of dietary components and the diversity of plants eaten were greater in the dry season than in the wet season (Overall: 67 species, n = 180 in dry season vs 41 species, n = 225 in wet season, χ^2 = 13.609, df = 1, P = 0.0002; Plants: n = 54 in dry season vs n = 29 in wet season, χ^2 = 14.293, df = 1, P = 0.0002).

***Review of diet in* Cyclura**.—Based on pooled natural diet data reported for all *Cyclura* species (Tables 4 and 5), 351 food items have been recorded, including those reported in the present study for *Cyclura cychlura*. Of those, 270 items were identified to plant species, with another 15 plant items having been identified to broader categories (e.g., genus, family, or grouping such as "cactus" or "grass"). Of the consumed plant species, 31% were recorded for two or more of the *Cyclura* species. *Coccoloba uvifera* was consumed by six iguana species and five plants (*Capparis flexuosa*, *Conocarpus erectus*, *Erithalis fruticosa, Ernodea littoralis,* and *Opuntia stricta*) were consumed by five *Cyclura* species. Including the present paper and other published data, the most food items documented were 109 for *Cyclura cychlura*, 84 of which are plant material. The number of food items documented for other well studied species include: 101 for *Cyclura lewisi*, 87 of which are plants; 92 for *Cyclura carinata*, 70 of which are plants; and 82 for *Cyclura stejnegeri*, 69 of which are plants.

All *Cyclura* (other than *Cyclura ricordii* from the Dominican Republic, the known diet of which is currently limited to reports of two species of plants) have been documented as eating some type of animal matter (Tables 4 and 5). Based on pooled diet data, 59 categories of animal matter have been identified as being consumed by *Cyclura,* including mammals, reptiles, birds, fish, and invertebrates (Appendix 6). Crabs (including land, marine, and hermit crabs) were the most widely reported animal food, documented for seven of the *Cyclura* species, followed by *Cyclura* skin, which was reported for six of the iguanas. The greatest diversity of animal matter was documented for *Cyclura cychlura* (21 types), *Cyclura carinata* (18 types), *Cyclura nubila* (13 types), and *Cyclura stejnegeri* (13 types).

Half of the *Cyclura* species were also documented to consume items that were neither plant nor animal (seven categories; Appendix 5), including algae, feces, fungus, and substrate (soil, sand, or rocks as separate categories). Feces was the most widespread of these items with four species reported to have consumed some type of feces, including that of iguanas, birds, mammals, and from unidentified sources.

DISCUSSION

This study shows that the native diet of *Cyclura cychlura* in the Exumas consists of a combination of a relatively few core plants supplemented by a wider range of foods consumed infrequently. Those plants that occur in greater than 5% of the samples (based on either frequency of occurrence or proportion of total dry mass) may be considered to compose a core diet. These nine core foods were widely represented in the diet across the islands, years, and seasons. *Casasia clusiifolia* and *Conocarpus erectus* were observed in over 30% of the samples and in proportions greater than 10% of the total dry mass, representing the most consumed foods. Habitat conservation measures for these iguanas should take the availability of these nine plant species into consideration.

The present scat analysis showed that *Cyclura cychlura* in the Exumas consumed 74 food items. Of these, 61% of the items occurred in fewer than 1% of the samples. This result indicates that *Cyclura cychlura* overall has a very broad diet. The idea that rock iguanas are generalist foragers has been suggested previously, such as by Auffenberg (1982) for *Cyclura carinata*. The synthesis of the diets of all *Cyclura*, showing that 351 food items have been recorded for the group collectively, reinforces that rock iguanas in general have a very diverse diet.

Although the consumption of favored foods has occasionally been noted in the literature, the importance of a few plants as forming a core diet appears not to have been sufficiently appreciated. For *Cyclura carinata* in the Turks and Caicos, two species of plants provided leaves and five species of plants provided fruits at greater than 10% of the total volume (Auffenberg 1982). For *Cyclura stejnegeri* in Mona Island, three plant species (*Capparis flexuosa*, *Centrosema virginiana*, and *Galactia dubia*) comprised greater than a third of the leaves in samples, and were eaten in all areas throughout the year (Wiewandt 1977). For *Cyclura pinguis* in Anegada, *Croton discolor* and *Byrsonima lucida* each accounted for nearly a quarter of the diet with *Coccoloba uvifera* representing another 16% (Mitchell 1999).

Cyclura cychlura consumed a greater diversity of food components in the dry season, and for six core plants, *Cyclura cychlura* differentially consumed flowers, fruit, or leaves in the two different seasons (Appendix 4). These findings were based on analyses of seasonally pooled data across years and islands, suggesting that these differences occurred despite any potential inter-annual climatic differences. Assessments of plant availability and nutritional content of the plants and parts being consumed might clarify reasons for these apparent seasonal shifts.

Seasonal differences in diet have also been noted for other species of *Cyclura*. *Cyclura carinata* has limited fruits and flowers in its winter diet corresponding to limited seasonal availability of those items (Iverson 1979) and have been shown to shift their consumption of different species throughout the fruiting season (Auffenberg 1982). When fruits and flowers are available, *Cyclura carinata* have been documented to feed habitually at the same location until the source is exhausted (Iverson 1979). Seasonal fruits and flowers have been shown to attract *Cyclura nubila* (Gerber 2000; Perera 2000). Seasonal feeding patterns have also been documented for *Cyclura lewisi* of Grand Cayman, including higher consumption of leaves in the dry season when seasonal fruits are less available (Burton 2000, 2010). Wiewandt (1977) noted that *Cyclura stejnegeri* primarily ate leaves and flowers in the spring and early summer before small fruits were available, but that these fruits became the most prevalent items eaten once present. Hayes et al. (2004) noted a positive correlation between iguana density and plant diversity, hypothesizing that iguanas might choose to live in areas with maximal food options and that this choice may be particularly important in winter when cooler temperatures reduce digestive efficiency at a time when potential food is less abundant.

Despite their proclivity and adaptations for herbivory (Iverson 1982), the food habits of *Cyclura cychlura* in the Exumas clearly include animal matter, with nearly 7% of the samples in the present study containing some animal remnant. Based on dry mass, the dietary contribution of animal matter was 1.3%. Animal food in adult *Cyclura carinata* diets was 6.1% by frequency of occurrence and 2.8% by volume (Auffenberg 1982). The proportionally lower dietary contributions based on mass and volume speak to one of the weaknesses of relying on scat samples in that animal protein is more thoroughly digested, and therefore likely under-represented in the samples. Nonetheless, the inter-specific comparison (Appendix 5) showed that all but one rock iguana species (*Cyclura ricordii*, the diet of which has been insufficiently recorded) have been documented eating some type of animal matter. These results suggest that animal material is not an insignificant part of *Cyclura* diet.

The consumption of animal matter has often been considered to be accidental. Wiewandt (1977) qualified his observations of snails, weevils, and feathers in the scat of *Cyclura stejnegeri* as being consumed unknowingly or because they were inadvertently collected with the samples. Wiewandt (1977) also discounted an observation by his field assistant of *Cyclura stejnegeri* eating a dead Common Ground Dove (*Columbina passerina*), a species that was also discovered in *Cyclura cychlura* scat samples in the present study. Auffenberg (1982) concluded that some insects, such as a beetle common on one of the main food plants of *Cyclura carinata*, were likely eaten inadvertently. But, he also suggested that termites were likely hunted.

The array of animal matter consumed by various species of *Cyclura* (Appendix 6) seems extensive for presumably solely herbivorous animals. As early as the 1970s, Carey (1975) noted that juveniles of six different *Cyclura* species preferentially consumed insects over vegetation, and adults of three species readily accepted dog food, mice, and rats to eat. Corroborating the latter observation, my own experience with a captive *Cyclura cornuta* is that meat is not only readily accepted but often preferred over vegetation. In recent years, observations of *Cyclura* species eating animal matter in the wild have increased. There are many records of scavenged carrion from fish, birds, mammals, reptiles, and invertebrates (Appendix 6), including photographic evidence of White-winged Dove (*Zenaida asiatica*) consumption by *Cyclura lewisi* (Burton 2010). Additionally, *Cyclura* have been observed eating live birds (Hines et al. 2002; Lemm and Alberts 2012), live mammals (Luther et al. 2012), conspecific juveniles (Iverson 1979; Hayes et al. 2004; Lemm and Alberts 2012), and invertebrates (Cyril 2001; Goodman 2007; Burton 2010). Published photographs illustrate the capture of a Black Rat (*Rattus rattus*) by *Cyclura cychlura* (Luther et al. 2012) and a conspecific juvenile by *Cyclura carinata* (Lemm and Alberts 2012). These data and observations suggest that hunting may play a larger role than usually acknowledged.

A literature survey of over 450 lizard species also suggests that omnivory is more widespread than traditionally acknowledged (Cooper and Vitt 2002). While plant consumption long has been considered atypical and rare among lizards, over half of the species were documented as eating at least some plant matter (Greene 1982; Cooper and Vitt 2002). Conversely, primarily herbivorous lizards are known to readily consume animal products in captivity (Carey 1975; Cooper and Vitt 2002; pers. obs.). True herbivores among lizards, estimated at only 2% (Pough 1973), 3% (Iverson 1982), or 4.3% (Cooper and Vitt 2002) of the total lizard species, are characterized by having physiological adaptations to herbivory. The genus *Cyclura* is a classic example of such primarily herbivorous lizards based on their adaptations to eating plants, particularly (and distinctively) leaves. They have specialized dentition (Hotton 1955; Montacnucci 1968; Throckmorton 1976), enlarged colons with specialized valves (Iverson 1980, 1982) and an intestinal flora to assist with cellulose digestion (Iverson 1982; McBee and McBee 1982). Nonetheless, these iguanas do eat animal material. Findings in this study suggest that more attention to the role of animals in the diet of rock iguanas is warranted, as might additional attention to the consumption of plants by predominantly carnivorous lizards.

The broad foraging of *Cyclura* extends beyond plants and animals. In the case of *Cyclura cychlura* in the Exumas, soil, seaweed, charcoal, and rock were also consumed. It is unclear how important these might be in the diet, although some might provide energy or minerals. From my observations, iguanas actively forage with tongue-flicking while exploring the ground and plants for potential food, likely using chemosensory cues as many other lizard species do (Cooper and Vitt 2002). *Cyclura cychlura* bite at and consume some, but not all of the objects they encounter. It seems that such items as seaweed, rocks, and charcoal may be consumed purposefully. Such sampling of initially unfamiliar foods certainly preceded adoption of the unnatural foods being presented by tourists on beaches, which include fruits, vegetables, and prepared human food. Sampling behavior may also lead them to eat potentially hazardous items such as marine sponges (Iverson et al. 2011). Other material, such as soil and sand, could be picked up as it adheres to target foods, which certainly is the case on tourist beaches where the consumption of sand attached to, or near, food thrown on the beach sand may have adverse consequences (Hines 2011; see also Knapp et al. 2013). In the present study, soil occurred in 3.9% of the samples and so was not insignificant. As is the case for animal materials, the role, if any, of substrate and charcoal in the diet of *Cyclura* deserves objective attention, both as a dietary supplement and for the potential negative effect of sand consumption occurring on feeding beaches.

Feces have been recorded in the diet of four species of *Cyclura*. Coenen (1995) reported iguanas on Guana Cay in the southern Exumas feeding on bird feces, particularly those of White-crowned Pigeons (*Patagioenas leucocephala*). *Cyclura lewisi* was observed eating Central American Agouti (*Dasyprocta punctuata*) feces in the wild (Goodman 2007). *Cyclura carinata* in the Turks and Caicos and *Cyclura nubila* from Cuba have been noted eating conspecific feces (Jeff Lemm, pers. comm.). This may be a method of obtaining necessary gut microfauna (Iverson 1979, 1982), but it seems unlikely that this is essential as only two *Cyclura* species have so far been reported to eat iguana feces. I found no evidence of coprophagy for *Cyclura cychlura* in the Exumas.

The present study showed *Cyclura cychlura* in the Exumas depend on relatively few plant species for the core of their natural diet. Additionally they consume smaller amounts of a wide variety of food and non-food items. The diet varies somewhat seasonally, from wet season to dry season. Although predominantly herbivorous, animal matter is not unimportant in their diet, and may well be the result of active hunting more than is generally appreciated. Dependence on a few species of plants makes these plants critical components of suitable habitat, and potential targets for habitat enhancement if ever required. These overall conclusions appear to be generally the case for other species of *Cyclura* so far studied in depth. Our understanding of the natural diet of *Cyclura* would benefit from increased diet documentation, especially for under-studied species such as *Cyclura ricordii.* The purpose of this study was to characterize the importance of certain plants in the diet, not to address the question of how the lizards select among those plants available. Future studies of selectivity might show if differences in availability affect plant species consumption. Finally, as previously mentioned, the consumption of animal matter and substrate deserve further examination.

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APPENDIX 1. Number of *Cyclura cychlura* scat samples from the Exuma Islands of The Bahamas analyzed for frequency of occurrence and biomass (in parentheses).

Island[1]	2006[2]	2007[3]	2008[2]	2009[3]	2010[2]	2013[4]
Alln	1	1				
Allg		29				
Bgc						11 (11)
Frrc	18 (2)	15	7 (5)	18 (5)	20 (4)	2 (2)
Glnc					8	4 (4)
Gunc	1					
Hhc						2 (2)
Lcal	10	3	10	9 (2)	19	5 (5)
Lnpc	6		1 (1)			8 (8)
Nwc		4				3 (3)
Nddc	7 (6)		1 (1)	19 (12)	21 (1)	1 (1)
Nadc	6 (1)			15 (8)	17 (1)	
Pasc	11 (3)					
Swal	3 (3)		9 (1)	14	16 (1)	
Wbc	16 (4)		14 (10)	10 (5)	10 (1)	
Totals	**79 (19)**	**52**	**42 (18)**	**85 (32)**	**111 (8)**	**36 (36)**

[1]Islands names are coded for conservation purposes. [2]Samples from both dry and wet seasons. Values represent total number of samples across seasons. [3]Samples from wet season. [4]Samples from dry season.

APPENDIX 2. Frequency of occurrence, listed in descending order, of items found within 405 scat samples of *Cyclura cychlura* from the Exuma Islands of The Bahamas, across 15 sampled islands and in six sampling years (2006 to 2013).

Food Item	Scientific Name	Frequency of Occurrence (%)	Island Occurrence (%)	Year Occurrence (%)
Plants				
Seven-year Apple	*Casasia clusiifolia*	39.28	100.00	100.00
Buttonwood	*Conocarpus erectus*	31.33	80.00	100.00
Sandfly-bush	*Rhachicallis americana*	28.43	73.33	100.00
Wild Dilly	*Manilkara bahamensis*	27.47	60.00	100.00
Lignum Vitae	*Guaiacum sanctum*	11.08	60.00	83.33
Bay Cedar	*Suriana maritima*	10.36	73.33	100.00
Joe-wood	*Jacquinia keyensis*	7.23	73.33	100.00
Coast Sophora	*Sophora tomentosa*	4.10	40.00	66.67
Pigeon-plum	*Coccoloba diversifolia*	3.61	40.00	66.67
Darling Plum	*Reynosia septentrionalis*	3.37	53.33	83.33
Silver Thatch	*Coccothrinax argentata*	3.37	53.33	50.00
Ram's-horn	*Pithecellobium keyense*	3.37	53.33	100.00
Wild Saffron	*Bumelia americana*	2.89	46.67	83.33
Common Ernodea	*Ernodea littoralis*	2.65	33.33	66.67
	Strumpfia maritima	2.65	33.33	83.33
Wild Tamarind	*Lysiloma latisiliquum*	2.41	20.00	50.00
Black Torch	*Erithalis fruticosa*	2.17	33.33	50.00
Turtle-grass	*Thalassia testudinum*	1.93	26.67	83.33
Buffalo-top	*Thrinax morrisii*	1.93	33.33	33.33
Common Prickly Pear	*Opuntia stricta*	1.69	20.00	50.00
Sea Ox-eye	*Borrichia arborescens*	1.45	13.33	50.00
Narrow-leaved Blolly	*Guapira discolor*	1.45	33.33	83.33
Sea Oats	*Uniola paniculata*	0.96	13.33	33.33
Crabwood	*Ateramnus lucidus*	0.96	13.33	33.33
	Sesuvium portulacastrum	0.96	20.00	33.33
Slender Paspalum	*Paspalum caespitosum*	0.72	6.67	16.67
Sea Grape	*Coccoloba uvifera*	0.72	13.33	33.33
	Catesbaea parviflora	0.72	20.00	33.33
Seashore Rush-grass	*Sporobolus virginicus*	0.72	13.33	33.33

APPENDIX 2. CONTINUED

Food Item	Scientific Name	Frequency of Occurrence (%)	Island Occurrence (%)	Year Occurrence (%)
White Stopper	*Eugenia axillaris*	0.72	20.00	50.00
	Ziziphus taylori	0.72	20.00	33.33
Caper-tree	*Capparis flexuosa*	0.72	6.67	16.67
Strong-back	*Bourreria ovata*	0.72	20.00	16.67
Bushy Salmea	*Salmea petrobiodes*	0.48	13.33	33.33
Bastard Torch	*Nectandra coriacea*	0.48	13.33	33.33
Bahama Stopper	*Psidium longipes*	0.48	13.33	16.67
Smooth Passion-flower	*Passiflora cupraea*	0.48	6.67	16.67
Whitewood	*Drypetes divserifolia*	0.24	6.67	16.67
Bay Lavender	*Mallotonia gnaphalodes*	0.24	6.67	16.67
Buccaneer Palm	*Pseudophoenix sargentii*	0.24	6.67	16.67
Coast Spurge	*Euphorbia mesemrianthemifolia*	0.24	6.67	16.67
Coco Plum	*Chrysobalanus icaco*	0.24	6.67	16.67
Morning Glory	*Ipomea indica*	0.24	6.67	16.67
Spanish Stopper	*Eugenia foetida*	0.24	6.67	16.67
	Paspalum sp.	0.24	6.67	16.67
	Jacquemontia havanensis	0.24	6.67	16.67
Locust-berry	*Byrsonima lucida*	0.24	6.67	16.67
Sword-bush	*Phyllanthus epiphyllanthus*	0.24	6.67	16.67
Goosegrass	*Eleusine indica*	0.24	6.67	16.67
Sampire	*Caraxeron vermicularis*	0.24	6.67	16.67
Wild Coffee	*Psychotria nervosa*	0.24	6.67	16.67
Canker-berry	*Solanum bahamense*	0.24	6.67	16.67
Cinnecord	*Acacia choriophylla*	0.24	6.67	16.67
Granny-bush	*Croton linearis*	0.24	6.67	16.67
Unidentified Plant Fragments		5.54	66.67	50.00
Bark		1.45	20.00	66.67
Twig		1.45	33.33	66.67
Animals				
Iguana Skin	*Cyclura cychlura*	2.17	40.00	66.67
Bird Feathers & Wing		1.45	20.00	50.00
Gray Peanut Snail	*Cerion incanum*	1.45	33.33	66.67
Beetle	Coleoptera	0.72	13.33	33.33
True Bug	Hemiptera	0.72	20.00	50.00
Ghost Crab	*Oxypode quadrata*	0.48	13.33	33.33
Hermit Crab	*Coenobita clypeatus*	0.48	13.33	16.67
Fly maggots	Brachycera	0.48	13.33	33.33
House Fly	*Musca domestica*	0.24	6.67	16.67
Tick	*Amblyomma torrei*	0.24	6.67	16.67
Worm	Oligochaeta	0.24	6.67	16.67
Snail		0.24	6.67	16.67
Other				
Organic Soil		3.86	53.33	66.67
Sargassum Weed	*Sargassum* sp.	0.48	13.33	33.33
Balloon Seaweed	*Colpomenia* sp.	0.24	6.67	16.67
Charcoal		0.24	6.67	16.67
Rock		0.24	6.67	16.67

APPENDIX 3. Food items from *Cyclura cychlura* scat samples (n = 113) from the Exumas, listed in descending order (except for unidentified plant matter) of percentage contribution to dry mass. See Appendix 2 for corresponding common names.

Food Item	Percent of Total Mass (%)	Food Item	Percent of Total Mass (%)
Plants		**Animals**	
Conocarpus erectus	17.07	Bird	0.55
Casasia clusiifolia	14.79	*Cyclura cychlura* Skin	0.48
Manilkara bahamensis	8.46	Crab	0.31
Coccothrinax argentata	7.78	Snail	<0.01
Rhachicallis americana	6.97		
Erithalis fruticosa	5.99	**Other**	
Jacquinia keyensis	5.03	Organic Soil	2.77
Guaiacum sanctum	2.77	Rock	<0.01
Capparis flexuosa	2.66		
Suriana maritima	2.29		
Thrinax morrisii	2.25		
Coccoloba diversifolia	1.92		
Sophora tomentosa	1.81		
Passiflora cupraea	1.35		
Strumpfia maritima	1.15		
Ziziphus taylori	0.94		
Ateramnus lucidus	0.90		
Psidium longipes	0.90		
Nectandra coriacea	0.89		
Pithecellobium keyense	0.89		
Coccoloba uvifera	0.83		
Reynosia septentrionalis	0.56		
Bourreria ovata	0.47		
Sesuvium portulacastrum	0.46		
Uniola paniculata	0.30		
Opuntia stricta	0.28		
Bumelia americana	0.17		
Jacquemontia havanensis	0.16		
Guapira discolor	0.12		
Chrysobalanus icaco	0.08		
Ernodea littoralis	0.07		
Lysiloma latisiliquum	0.07		
Drypetes divserifolia	0.06		
Phyllanthus epiphyllanthus	0.05		
Byrsonima lucida	0.05		
Paspalum caespitosum	0.03		
Thalassia testudinum	0.03		
Borrichia arborescens	0.02		
Euphorbia mesemrianthemifolia	0.02		
Eugenia axillaris	0.02		
Psychotria nervosa	0.01		
Catesbaea parviflora	0.01		
Paspalum sp.	0.01		
Solanum bahamense	<0.01		
Sporobolus virginicus	<0.01		
Acacia choriophylla	<0.01		
Caraxeron vermicularis	<0.01		
Croton linearis	<0.01		
Eleusine indica	<0.01		
Unidentified Plant Fragments	5.12		
Bark	0.05		
Twig	0.02		

APPENDIX 4. Seasonal differences in plant parts for nine primary food species consumed in dry season versus wet season by *Cyclura cychlura* in the Exuma Islands of The Bahamas. NS = not significant.

Plant	Food Item	Dry Season (n = 174) Frequency of Occurrence (%)	Wet Season (n = 201) Frequency of Occurrence (%)	χ^2 -value	Corrected P-value
Casasia clusiifolia	flowers	0.00	1.00	1.730	NS
	fruit	50.00	22.89	19.333	0.0021
	leaves	24.14	2.99	32.602	0.002
Suriana maritima	flowers	0.57	1.49	0.730	NS
	fruit	2.87	2.99	0.004	NS
	leaves	9.77	7.96	0.347	NS
Erithalis fruticosa	flowers	0.57	0	1.155	NS
	leaves	3.45	1.49	1.486	NS
Conocarpus erectus	flowers	0.00	2.99	5.194	NS
	fruit	5.17	17.41	11.909	0.0102
	leaves	23.56	30.35	1.579	NS
Jacquinia keyensis	fruit	6.90	6.47	0.026	NS
	leaves	5.17	0	10.397	0.0195
Guaiacum sanctum	leaves	23.56	2.99	10.397	0.0019
Rhachicallis americana	flowers	0	4.48	7.791	NS
	leaves	27.01	32.34	0.886	NS
Coccothrinax argentata	fiber	1.15	0	35.283	NS
	fruit	8.05	0	16.172	0.0018
Manilkara bahamensis	flowers	1.15	23.38	35.283	0.016
	fruit	15.52	19.40	0.800	NS
	leaves	3.45	10.45	6.346	NS

APPENDIX 5. Comparison of the natural diets of the ten extant species of the genus *Cyclura*, showing dietary components as recorded in the literature. Number annotation indicate sources; plant names are those used by the authors.

Food Items	***carinata*** *5, 9, 10*	***collei*** *5, 10, 16, 28*	***cornuta*** *10, 12, 26*	***cychlura*** *4, 9, 21, 22, 23, 24, 25, 30*	***lewisi*** *3, 5, 19, 27, 28, 29*	***nubila*** *2, 8, 10, 11, 14, 15, 18*	***pinguis*** *1, 5, 10, 15, 20*	***ricordii*** *10, 12*	***rileyi*** *5, 7, 13*	***stejnegeri*** *6, 10, 17, 28*
Plants										
Acacia acuifera	X									
Acacia anegadensis							X			
Acacia choriophylla				X						
Acalypha alcopercuroidea					X					
Alysicarpus vaginalis					X					
Ambrosia hispida	X					X				
Amyris elemifera	X									X
Andropogon glomeratus	X									
Andropogon bicornis						X				
Angadenia sagraei				X						
Amaranthus sp.					X					
Annona glabra				X						
Antirhea acutata										X
Antirhea myrtifolia	X			X						
Argusia gnaphalodes				X						
Argythamnia argentata	X									
Argythamnia candicans										X
Argythamnia seriacea	X									
Asystasia gangetica					X					
Auerodendron northropianum				X						
Avicennia germinans				X		X				
Ayenia pusilla										X

APPENDIX 5. CONTINUED

Food Items	*carinata* 5, 9, 10	*collei* 5, 10, 16, 28	*cornuta* 10, 12, 26	*cychlura* 4, 9, 21, 22, 23, 24, 25, 30	*lewisi* 3, 5, 19, 27, 28, 29	*nubila* 2, 8, 10, 11, 14, 15, 18	*pinguis* 1, 5, 10, 15, 20	*ricordii* 10, 12	*rileyi* 5, 7, 13	*stejnegeri* 6, 10, 17, 28
Batis maritima						X	X			
Bauhinia divaricata		X				X				
Bidens alba					X					
Blechum brownei					X					
Blutaparon vermiculare				X	X					
Boerhaavia diffusa										X
Boerhaavia erecta					X					X
Borrichia arborescens				X					X	
Bourreria ovata	X			X						
Bourreria succulenta							X			X
Bucida buceras	X									
Bumelia americana	X			X						
Bumelia salicifolia				X						
Bunchosia media		X								
Bursera simaruba				X						
Byrsonima cuneata	X									
Byrsonima lucida				X			X			
Caesalpinea divergens										X
Callisia repens										X
Calyptranthes paliens	X									
Canavalia maritima						X				
Canavalia rosea						X				
Canella winterana					X					
Capparis cynophallophora						X				X
Capparis ferruginea		X			X					
Capparis flexuosa				X	X	X	X			X
Capraria biflora					X					X
Casasia clusiifolia	X			X						
Cassia biflora	X									
Cassia lineata	X									
Cassine xylocarpa							X			
Cassytha filiformis				X						
Catesbaea foliosa	X									
Catesbaea parviflora				X						
Cattleyopsis lindenii				X						
Centrosema virginiana										X
Chamaecrista nictitans					X					
Chamaecyce opthalmica					X					
Chamaescyce buxifolia	X									
Chamaescyce camagueyensis						X				
Chamaescyce hirta					X					
Chamaescyce hypericifolia					X					
Chamaescyce mesembrianthemifolia					X					
Chamaescyce prostrata					X					X
Chamaescyce veginulata	X									
Chiococca alba					X					
Chiococca parvifolia				X						
Chionanthus caymanensis					X					
Chloris petraea	X									
Chrysobalanus icaco				X		X				
Cissus caustica										X
Cissus trifoliata					X					

APPENDIX 5. CONTINUED

Food Items	*carinata* 5, 9, 10	*collei* 5, 10, 16, 28	*cornuta* 10, 12, 26	*cychlura* 4, 9, 21, 22, 23, 24, 25, 30	*lewisi* 3, 5, 19, 27, 28, 29	*nubila* 2, 8, 10, 11, 14, 15, 18	*pinguis* 1, 5, 10, 15, 20	*ricordii* 10, 12	*rileyi* 5, 7, 13	*stejnegeri* 6, 10, 17, 28
Citharexylum fruticosum						X				
Clitoria ternatea					X					
Coccoloba sp.							X			
Coccoloba diversifolia				X						X
Coccoloba krugii	X						X			
Coccoloba microstachya										X
Coccoloba uvifera	X			X		X	X		X	X
Coccothrinax argentata				X						
Coccothrinax inaguensis	X									
Coccothrinax proctorii					X					
Commelina virginica										X
Comocladia veluntina		X								
Conocarpus erectus	X			X		X	X		X	
Corchorus aestuans					X					
Corchorus hirsutus					X					X
Corchorus siliquosus					X					
Cordia bahamensis	X									
Cordia caymanensis					X	X				
Cordia rupicola							X			
Cordia sebestena					X	X				
Crossopetalum rhacoma	X						X			X
Croton betulinus										X
Croton discolor							X			X
Croton humilis										X
Croton linearis	X			X						
Cuscuta americana	X									
Cynanchium lineare										X
Cynanchium monensis										X
Cynanchum eggersii	X									
Cyperus fuligineus	X									
Cyperus gigantus						X				
Dalechampia scandens				X						
Desmodium mollis										X
Desmodium incanum					X					
Digitaria filiformis	X									
Dodonaea viscosa							X			
Drypetes diversifolia				X						
Echites umbellata				X						
Elaeodendron xylocarpum							X			
Eleusine indica				X						
Eragrostis salzmani						X				
Erithalis fruticosa	X			X		X	X			X
Ernodea littoralis	X			X	X	X	X			
Ernodia millspaughii	X									
Erythroxylon areolatum					X					X
Erythroxylum rotundifolium					X					
Eugenia axillaris				X	X		X			
Eugenia foetida	X			X						
Eupatorium corymbosum										X
Eupatorium odoratum					X					
Euphorbia blodgettii				X						
Euphorbia mesembrianthemifoliea	X			X						
Euphorbia petiolaris										X

APPENDIX 5. CONTINUED

Food Items	*carinata* 5, 9, 10	*collei* 5, 10, 16, 28	*cornuta* 10, 12, 26	*cychlura* 4, 9, 21, 22, 23, 24, 25, 30	*lewisi* 3, 5, 19, 27, 28, 29	*nubila* 2, 8, 10, 11, 14, 15, 18	*pinguis* 1, 5, 10, 15, 20	*ricordii* 10, 12	*rileyi* 5, 7, 13	*stejnegeri* 6, 10, 17, 28
Evolvulus sp.	X									
Evolvulus squamosus	X									
Exostema caribacum				X						
Ficus aurea					X					
Ficus citrifolia										X
Ficus crassinervia										X
Fimbristilis spatacea						X				
Galactia dubia										X
Gayoides crispum										X
Guaiacum sanctum	X			X						
Guapira discolor	X			X	X	X				
Guapira obtusata	X									
Guettarda krugii	X									
Gundlachia corymbosa	X									
Gramineae				X						
Gunlachia corymbosa				X						
Gyminda latifolia										X
Gymnanthes lucida				X						
Hamelia cuprea					X					
Harrisia portoricensis										X
Hibiscus esculentus					X					
Hibiscus tilaceus		X								
Hippomane mancinella			X		X	X				X
Hylocereus triangularis		X								
Hypelate trifoliata	X				X					X
Ipomea indica				X	X					
Ipomoea pes-caprae	X				X	X				
Ipomoea trilobata					X					X
Ipomoea violacea					X	X				
Indigophora suffruticosa										X
Jacquemontia pentantha										X
Jacquemontia havanensis				X						
Jacquinia arborea							X			X
Jacquinia keyensis	X			X						
Jatropha multifida										X
Krugiodendron ferreum										X
Laguncularia racemosa						X				
Lantana bahamensis					X					
Lantana involucrata		X			X	X	X			X
Lantana reticulata							X			
Lasiacis divaricata		X			X					
Leucaena leucocephala				X						
Lysiloma latisiliquum				X						
Manilkara bahamensis	X			X						
Manilkara zapota				X						
Maytenus buxifolia	X									
Melocactus intortus	X						X			
Metopium brownii		X								
Metopium toxiferum	X			X		X				X
Momordica charantia					X					
Morinda citrifolia					X					
Morinda royoc		X			X					
Myrcianthes fragrans				X	X	X				
Nectandra coriacea				X						

APPENDIX 5. CONTINUED

Food Items	*carinata* 5, 9, 10	*collei* 5, 10, 16, 28	*cornuta* 10, 12, 26	*cychlura* 4, 9, 21, 22, 23, 24, 25, 30	*lewisi* 3, 5, 19, 27, 28, 29	*nubila* 2, 8, 10, 11, 14, 15, 18	*pinguis* 1, 5, 10, 15, 20	*ricordii* 10, 12	*rileyi* 5, 7, 13	*stejnegeri* 6, 10, 17, 28
Opuntia sp.			X		X	X	X			
Opuntia spinosissima		X								
Opuntia stricta	X			X		X			X	X
Panicum maximum										X
Paspalum sp.				X						
Paspalum caespitosum				X						X
Paspalum glabrum										X
Paspalum laxum	X									
Passiflora bahamensis				X						
Passiflora cupraea				X	X					
Passiflora pectinata	X									
Petiveria sp.		X								
Phyla nodiflora					X					
Phyllanthus amarus					X					
Phyllanthus epiphyllanthus	X			X						
Picrodendron baccatum					X	X				
Pisonia albida										X
Pisonia rotundata							X			
Pisonia subcordata							X			
Pithecellobium guadelupense	X					X				
Pithecellobium keyense	X			X						
Pithecellobium unguis-cati	X						X			
Plumeria obtusa	X									X
Portulaca oleracea					X		X			
Portulaca sp.										X
Pseudophoenix sargentii				X						
Psidium longipes	X			X						
Priva lappulacea					X					
Psychotria ligustrifolia				X						
Psychotria nervosa				X	X					
Rauwolfia tetraphylla										X
Randia aculeata	X			X	X					
Reynosia septentrionalis	X			X			X			
Reynosia uncinata							X			X
Rhachicallis americana	X			X		X			X	
Rhizophora mangle	X			X		X			X	
Rhynchosia minima					X					
Rivina humilis					X		X			X
Ruellia tuberosa					X					
Salmea petrobiodes				X						
Sarcomphalus taylori										X
Sarcostemma clausum					X					
Savia bahamensis				X						
Scaevola plumerieri	X									
Scaevola seriacea					X					
Schaefferia frutescens										X
Scleria lithosperma					X					
Selenicerus grandiflorus						X				
Sesuvium portulacastrum				X	X	X			X	
Sida acuminata										X
Sida glabra										X
Sida glutinosa					X					

APPENDIX 5. CONTINUED

Food Items	*carinata* 5, 9, 10	*collei* 5, 10, 16, 28	*cornuta* 10, 12, 26	*cychlura* 4, 9, 21, 22, 23, 24, 25, 30	*lewisi* 3, 5, 19, 27, 28, 29	*nubila* 2, 8, 10, 11, 14, 15, 18	*pinguis* 1, 5, 10, 15, 20	*ricordii* 10, 12	*rileyi* 5, 7, 13	*stejnegeri* 6, 10, 17, 28
Sida stipularis					X					
Smilax auriculata				X						
Solanum bahamense				X						
Solanum persicifolium							X			
Solanum racemosum							X			
Sophora tomentosa				X						
Sorghum halepense						X				
Spermacoce assurgens					X					
Spermacoce confusa					X					
Spigelia anthelmia					X					
Spilanthes urens					X					
Sporobolus dominguensis						X				
Sporobolus virginicus				X		X	X			
Stachytarpheta jamaicensis					X					X
Strumpfia maritima	X			X		X	X			
Stigmaphyllon periplocifolium										X
Stylosanthes hamata				X	X	X	X			X
Suriana maritima				X		X				
Swietenia mahagoni				X						
Tabebuia bahamensis	X			X						
Tabebuia heterophylla					X	X	X			X
Tabebuia riparia		X								
Tecoma stans					X					
Tephrosia cinerea										X
Teramnus labialis					X					
Tetramirca canalicula							X			
Thalasia testudinum				X		X				
Thrinax microcarpa	X									
Thrinax morrisii				X						
Thrinax parviflora						X				
Thrinax radiata						X				
Thyralis sp.	X									
Tillandsia utriculata							X			
Torrubia discolor										X
Tournefortia microphylla										X
Tournefortia volubilis	X									
Tribulus cistoides										X
Tridax procumbens					X					
Turnerna ulmifolia					X					
Uniola paniculata				X						
Vernonia divaricata					X					
Vigna luteola					X					
Waltheria indica					X					
Zanthoxylum flavum	X									
Ziziphus rignonii			X				X	X		
Ziziphus taylori	X			X						
Unidentified Cactus			X				X	X		
Unidentified Grass					X		X			
Unidentified Flowers					X					
Unidentified Fruits, Nuts					X					
Unidentified Leaves, Stems				X	X					
Unidentified Twigs, Bark				X						

APPENDIX 5. CONTINUED

Food Items	*carinata* 5, 9, 10	*collei* 5, 10, 16, 28	*cornuta* 10, 12, 26	*cychlura* 4, 9, 21, 22, 23, 24, 25, 30	*lewisi* 3, 5, 19, 27, 28, 29	*nubila* 2, 8, 10, 11, 14, 15, 18	*pinguis* 1, 5, 10, 15, 20	*ricordii* 10, 12	*rileyi* 5, 7, 13	*stejnegeri* 6, 10, 17, 28
Animals										
Annelida				X						
Arthropoda	X		X	X	X	X	X		X	X
Aves	X			X	X	X			X	X
Mammalia				X		X				
Mollusca	X	X		X	X	X				X
Pisces	X									
Porifera				X						
Reptilia	X			X	X	X	X		X	X
Unspecified Invertebrates							X			
Other										
Algae				X						
Feces	X			X	X	X				
Fungus	X				X					
Rock				X	X				X	
Sand	X								X	
Soil	X			X	X				X	
Unidentified					X					

(1) Mitchell 1999; (2) Beovides-Casas and Mancina 2006; (3) Goodman 2007; (4) Knapp 2005; (5) Lemm et al. 2010; (6) Wiewandt 1977; (7) Cyril 2001; (8) Gerber et al. 2002; (9) Auffenberg 1982; (10) Iverson 1979; (11) González Rossell et al. 2001; (12) Hartley at al. 2000; (13) Hayes et al. 2004; (14) Perera 1985; (15) Lemm and Alberts 2012; (16) Vogel 2000; (17) Wiewandt and Garcia 2000; (18) Gerber 2000; (19) Burton 2000; (20) Mitchell 2000; (21) Coenen 1995; (22) Knapp 1995; (23) Hines et al. 2002; (24) Iverson et al. 2011; (25) Luther et al. 2012; (26) Schwartz and Henderson 1991; (27) Burton 2010; (28) Carey 1975; (29) Burton 2011; (30) This study.

APPENDIX 6. Detailed comparison of animal material in the natural diets of the 10 extant species of the genus *Cyclura*, except *Cyclura ricordii* that has no records of animal consumption. Items are checked for the most specific category possible. See Appendix 5 for associated citations.

Food Items	*carinata*	*collei*	*cornuta*	*cychlura*	*lewisi*	*nubila*	*pinguis*	*rileyi*	*stejnegeri*
ANNELIDA									
Oligochaeta (earthworm)				X					
ARTHROPODA									
Arachnida									
Amblyomma torrei (tick)				X					
Solpugidae	X								
Chilopoda (centipede)							X		
Insecta									
Ascia monuste (Great So. White Butterfly)									X
Blattodea (cockroach)							X		
Blattodea (termite)	X			X					
Coleoptera (beetle)	X			X		X	X		
Curculionidae (weevil)	X								X
Diptera (maggot)				X					
Diptera (fly larvae)	X								
Insecta (unspecified insects)				X			X	X	X
Lepidoptera (bee)							X		
Lepidoptera (caterpillar)							X		X
Lepidoptera (honeybee)	X								
Musca domestica (House Fly)				X					

APPENDIX 6. Detailed comparison of animal material in the natural diets of the 10 extant species of the genus *Cyclura*, except *Cyclura ricordii* that has no records of animal consumption. Items are checked for the most specific category possible. See Appendix 5 for associated citations.

Food Items	*carinata*	*collei*	*cornuta*	*cychlura*	*lewisi*	*nubila*	*pinguis*	*rileyi*	*stejnegeri*
Nasutitermes costatus (termite)	X								
Odonata	X								
Ollanta sp. (cicada)	X				X				
Orthoptera (grasshopper)								X	
Pseudosphinx sp.									X
Pseudosphinx tetrio (Tetrio Sphinx Moth)			X		X				X
Scarabaeidae									X
Strategus sarpedon						X			
Malacostraca									
Cardisoma guanahumi (Blue Land Crab)	X					X		X	
Clibanarius sp. (hermit crab)	X							X	
Coenobita clypeatus (Caribbean Hermit Crab)				X					
Decapoda (unspecified crab)	X		X	X	X	X	X		X
Gecarcinus lateralis (Red Land Crab)									X
Gecarcinus ruricola (Black Land Crab)					X				
Ocypode quadrata (Atlantic Ghost Crab)				X					
CHORDATA									
Aves									
Bird Carrion	X			X				X	
Bird Live				X		X			
Columbidae (dove)					X	X			
Columbina passerina (Common Ground Dove)				X					
Feathers	X			X					X
Porphyrula martinica (Purple Gallinule)								X	
Puffinus lherminieri (Audubon's Shearwater)				X					
Sterna anaethetus (Bridled Tern)								X	
Tiaris canora (Cuban Grassquit)						X			
Zenaida asiatica (White-winged Dove)					X	X			
Zenaida macroura (Mourning Dove)						X			
Mammalia									
Capromys pilorides (Hutia)						X			
Rattus rattus (Black Rat)				X					
Pisces									
Fish Carrion	X								
Reptilia									
Alsophis cantherigerus Skin (Cuban Racer)						X			
Cyclura Juvenile (conspecific)	X							X	
Cyclura Skin (conspecific)	X			X	X	X	X		X
MOLLUSCA									
Cerion incanum (Gray Peanut Snail)				X					
Drymaeus elongatus (tree snail)									X
Gastropoda (slug)	X								
Gastropoda (snail)		X		X					
Melampus coffeus (Coffee Bean Snail)						X			
Veronicella sp. (slug)					X				
PORIFERA									
Marine Sponge				X					