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**Dataset Paper**

# Detailed Food Web Networks of Three Greater Antillean Coral Reef Systems: The Cayman Islands, Cuba, and Jamaica

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## Dataset

*Dataset Item 1 (Table)*. Trophic data for the Cayman Islands. Data specify trophic guilds, the number of prey per guild, a list of those prey guilds, and the major foraging habitat of the guild. In the first column is given the Guild Number. Guild numbers are standard among all the datasets; for example, guild number 1 represents planktonic bacteria in the Cayman, Cuban, and Jamaican datasets. In the second column (Guild Description) is given the common language guild descriptions. The descriptions indicate the major trophic niche of the guild in the case of multispecies guilds (e.g., Macroplanktonic carnivores I), the major taxon of the guild (e.g., *Eucidaris*), or in the case of vertebrates, a common name of the species (e.g., scorpionfish). In the third column (Foraging Habitat) is given the major foraging habitat of vertebrate guild members. In this column, r means reef; rg, reef and seagrass beds; and g, seagrass beds. In the fourth column (Number of Prey) is given the total number of guilds that contain species that are preyed upon by the guild in question. In the fifth column (Prey) is given a list of prey guilds. Missing data are indicated by a period (.).

*Column 1:* Guild Number
*Column 2:* Guild Description
*Column 3:* Foraging Habitat
*Column 4:* Number of Prey
*Column 5:* Prey

▸ 857470.item.1.xlsx

*Dataset Item 2 (Table)*. Trophic data for Cuba. Data specify trophic guilds, the number of prey per guild, a list of those prey guilds, and the major foraging habitat of the guild. In the first column is given the Guild Number. Guild numbers are standard among all the datasets; for example, guild number 1 represents planktonic bacteria in the Cayman, Cuban, and Jamaican datasets. In the second column (Guild Description) is given the common language guild descriptions. The descriptions indicate the major trophic niche of the guild in the case of multispecies guilds (e.g., Macroplanktonic carnivores I), the major taxon of the guild (e.g., *Eucidaris*), or in the case of vertebrates, a common name of the species (e.g., scorpionfish). In the third column (Foraging Habitat) is given the major foraging habitat of vertebrate guild members. In this column, r means reef; rg, reef and seagrass beds; and g, seagrass beds. In the fourth column (Number of Prey) is given the total number of guilds that contain species that are preyed upon by the guild in question. In the fifth column (Prey) is given a list of prey guilds. Missing data are indicated by a period (.).

*Column 1:* Guild Number
*Column 2:* Guild Description
*Column 3:* Foraging Habitat
*Column 4:* Number of Prey
*Column 5:* Prey

▸ 857470.item.2.xlsx

*Dataset Item 3 (Table)*. Trophic data for Jamaica. Data specify trophic guilds, the number of prey per guild, a list of those prey guilds, and the major foraging habitat of the guild. In the first column is given the Guild Number. Guild numbers are standard among all the datasets; for example, guild number 1 represents planktonic bacteria in the Cayman, Cuban, and Jamaican datasets. In the second column (Guild Description) is given the common language guild descriptions. The descriptions indicate the major trophic niche of the guild in the case of multispecies guilds (e.g., Macroplanktonic carnivores I), the major taxon of the guild (e.g., *Eucidaris*), or in the case of vertebrates, a common name of the species (e.g., scorpionfish). In the third column (Foraging Habitat) is given the major foraging habitat of vertebrate guild members. In this column, r means reef; rg, reef and seagrass beds; and g, seagrass beds. In the fourth column (Number of Prey) is given the total number of guilds that contain species that are preyed upon by the guild in question. In the fifth column (Prey) is given a list of prey guilds. Missing data are indicated by a period (.).

*Column 1:* Guild Number
*Column 2:* Guild Description
*Column 3:* Foraging Habitat
*Column 4:* Number of Prey
*Column 5:* Prey

▸ 857470.item.3.xlsx

*Dataset Item 4 (Table)*. Guild key. This is a list of all guilds present in Dataset Items 1–3 (Tables) and the taxa assigned to those guilds. There is a total of 265 guilds, though none of the regions described contains all those guilds. There are also several guilds or species that are absent from all the regions, but have nevertheless been recorded in the northern Caribbean region, and are likely to be present in undescribed refuges or occasional members of the regions, for example, the tiger shark *Galeocerdo cuvieri*. In the first column is given the Guild Number; in the second (Taxa), the taxa assigned to guild; in the third (Fish Body Length), the average body size (fork length, cm) of bony and cartilaginous fish species. Maximum body size is recorded if average size is not available. Missing data are indicated by a period (.). In columns 4–6 is shown the presence of vertebrate species in the Cayman Islands, Cuba, or Jamaica indicated by "x" sign.

*Column 1:* Guild Number
*Column 2:* Taxa
*Column 3:* Fish Body Length (cm)
*Column 4:* Cayman Islands
*Column 5:* Cuba
*Column 6:* Jamaica

▸ 857470.item.4.xlsx

*Dataset Item 5 (Binary Matrix)*. Binary adjacency matrix of the Cayman Islands food web. Rows are predatory guilds and columns are prey. The $ij$ th element of the matrix is 1 if guild $i$ preys upon species in guild $j$, and 0 otherwise. Note that the matrices are therefore asymmetric about the diagonal, and that there are 265 rows representing each guild in the dataset. Taxa that are missing from the food web, for example, the tiger shark Galeocerdo cuvieri, are included as disconnected nodes, that is, rows and columns comprising zero elements only. This is for consistency with future datasets of related regions in which the species might be present.

▸ 857470.item.5.dat

*Dataset Item 6 (Binary Matrix)*. Binary adjacency matrix of the Cuban food web. Rows are predatory guilds and columns are prey. The $ij$th element of the matrix is 1 if guild $i$ preys upon species in guild $j$, and 0 otherwise. Note that the matrices are therefore asymmetric about the diagonal and that there are 265 rows representing each guild in the dataset. Taxa that are missing from the food web, for example, the tiger shark *Galeocerdo cuvieri*, are included as disconnected nodes, that is, rows and columns comprising zero elements only. This is for consistency with future datasets of related regions in which the species might be present.

▸ 857470.item.6.dat

*Dataset Item 7 (Binary Matrix)*. Binary adjacency matrix of the Jamaican food web. Rows are predatory guilds and columns are prey. The $ij$th element of the matrix is 1 if guild $i$ preys upon species in guild $j$, and 0 otherwise. Note that the matrices are therefore asymmetric about the diagonal and that there are 265 rows representing each guild in the dataset. Taxa that are missing from the food web, for example, the tiger shark *Galeocerdo cuvieri*, are included as disconnected nodes, that is, rows and columns comprising zero elements only. This is for consistency with future datasets of related regions in which the species might be present.

▸ 857470.item.7.dat