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Question: How does the shell number and morphology of seashells on Dominica differ when comparing the shells on the Caribbean Sea side beaches to the shells on the Atlantic Ocean side beaches?

Hypotheses: 1. There will be more shells on the Caribbean Sea (leeward) side of the island.
2. The shell morphology will be different from side to side.

Methods: We went to a beach on each side of the island: Castle Bruce on the Atlantic Ocean side (East, windward) on May 29, 1998 and Coconut Beach on the Caribbean Sea side (West, leeward) on June 1, 1998. We picked up shells for approximately 30 minutes at each site. Later I classified the shells using a shell guide purchased in Roseau called Seashells of the Caribbean. A few shells were not to be found in the book, so Emily Towers, another student in the group, helped me figure the rest out.

Results: Total number of shells at Castle Bruce: 35
Total number of shells at Coconut Beach: 214

Castle Bruce Atlantic Ocean Side May 29, 1998 Sand: Dark

	Number Found:
1. Turkey Wing Arca zebra	1
2. Dwarf Suck-on Limpet Acmaea leucopleura	1
3. Common Spirula Spirula spirula	1
4. Common Caribbean Donax Donax denticulatus	1
5. Caribbean Olive Shell Oliva scripta	1
6. Milk Moon Shell Polinices lacteus	2
7. Snail Shells	3
8. Common Egg Cockle Laevicardium laevigatum	8
9. Assorted Augers	17

Coconut Beach Caribbean Sea Side June 1, 1998 Sand: Light

	Number Found:
1. Spotted Limpet Acmaea pustulata	1
2. Dyson's Keyhole Limpet Diodora dysoni	1
3. Sentis Scallop Chlamys sentis	1
4. Atlantic Yellow Cowrie Cypraea spurca acicularis	1
5. Auger	1
6. Caribbean Olive Shell Oliva scripta	1
7. King Venus Chione paphia	1
8. Faust Tellin Arcopagia fausta	1
9. Tiger Lucine Codakia orbicularis	1
10. Whelk	1
11. Scallop	1
12. Common Baby's Ear Sinum perspectivum	2
13. Lion's Paw Scallop Lyropecten nodosus	2
14. Turkey Wing Arca zebra	4

15.	Decussate Bittersweet Glycymeris decussata	5
16.	Atlantic Bittersweet Glycymeris undata	5
17.	Dwarf Suck-on Limpet Acmaea leucopleura	7
18.	Comb Bittersweet Glycymeris pectinata	9
19.	Assorted Oysters	15
20.	White Sunrise Tellin Tellina radiata unimaculata	16
21.	Large Stigilla Strigilla carnaria	18
22.	Common Caribbean Donax Donax denticulatus	120

Discussion: The number of shells found on each beach differed dramatically. There were more shells on the Caribbean Sea Side of the island than on the Atlantic Ocean side (214 vs. 35). This could be due to the calmer seas or tourists. There was also a greater variety of shells on the Caribbean Sea side versus the Atlantic Ocean side (22 vs. 9).

Conclusion: Both my hypotheses can be accepted for now. There were more shells on the Caribbean Sea (leeward) side of Dominica and the shell morphology was different from side to side of the island.

Further Research: My research is a very crude start to studying shells on the Dominican beaches. There are many opportunities for further research.

Some ideas are:

- Do the same thing, but make more runs on several different beach sites on each side of the island.
- Compare the shells from different colored sand beaches.
- Visit beaches during different times of the day to study the shells during high and low tides.
- Collect and compare shells from a popular tourist beach to a not often visited beach to study the effects of tourism.

Works Cited:

Sutty, Lesley. Seashells of the Caribbean.
The MacMillan Press ltd. Caribbean. 1990.

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