GEOGRAPHIC FIELDWORK

(1) Reasoning behind field study work Cospuden lake.

In order to provide an enriching opportunity, and experience geographic fieldwork methods, we designed a study for them along the shore of Lake Cospuden. The fieldwork question was “Does the management of Lake Cospuden for leisure (recreation) inhibit the recovery of the natural environment?”

Prior to the excursion, the Spanish students were taught how to use the fieldwork equipment in the forest behind the school. Once at the lake, they were teamed up into small groups and given a site location from which they would collect their data. The primary data was recorded in the accompanying file. (appendix)

To answer the overarching fieldwork question, two hypotheses structured the study:

H1: **The quality of leisure/recreation services reduce any environmental impacts in other areas around the lake.**

For the first hypothesis, students collected a variety of primary data, which includes a bipolar recreation survey, a desire line count around the lake, created a land use map and key around the lake.

H2: **The North beach is experiencing longshore drift (a type of erosion that take the sand and moves it up the beach)**

For the second hypothesis, they conducted a longshore drift study which looks at the wind speed and direction, wave direction and movement of materials up and down the beach which thus requires the city to install groynes to retain the sand and gravel on the beach.

Once the data was collected, we rode back to school and began to work through the data, creating graphs and analysing the results in order to answer the fieldwork question and hypotheses.

This fieldwork experience was designed to learn more about water resources in Leipzig as a source of leisure and environmental restoration, while allowing them an educational experience which they normally would not have access to.

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Topic: Lake Management

Fieldwork question: Does the management of Lake Cospuden for leisure (recreation) inhibit the recovery of the natural environment?

Figure 1. Lake Cospuden

H1: The quality of leisure/recreation services reduce any environmental impacts in other areas around the lake.

Methodology:

1. Conduct a bipolar recreation survey of the three designated beaches around the lake.

2. Conduct a desire line count around the lake (paths leaving from the paved bike path). A desire line is a newly worn path through the grass.

3. Create key and label the map by land uses around the lake.

Criteria	Bi-polar score							Justification
	+3	+2	+1	0	-1	-2	-3	
Parking lots are conveniently located and accessible for visitors. There is an adequate number of parking spaces.								
Quality of restaurants for visitor is good, varied, and affordable.								
There is reliable and convenient public transportation								
Quantity and quality of toilets are good and accessible.								
Beach is clean, trash and recycling bins available and used.								
Recreational equipment is present and in good condition.								
Designated hike/bike paths with signage.								
Pavement is good quality and useable for a number of activities.								
Visitors remain on the designated beaches.								
The area between the beaches is protected as it recovers natural vegetation.								

Desire lines count:

Land uses around Cospudener
Legend:

H2: The North beach is experiencing longshore drift (a type of erosion that take the sand and moves it up the beach)

Materials: timer (phone timer will work), anemometer, compass, cork, tape measure.

Methodology:

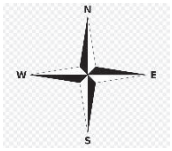
1. Using an anemometer, record the wind speed and direction (using a compass).

Location	Wind speed (avg)	Wind direction	Temperature

2. Mark a starting point on the beach. At the starting point, place the cork in the water and start your timer. After 5 minutes mark the location of your cork and measure the distance and direction the cork travelled. Repeat this 3 times and then take the average distance the cork travelled.

Location:	Distance cork travelled	Direction cork travelled
Test 1		
Test 2		
Test 3		
Total :		

3. Measure the height of the sand on each side of the groynes in several locations. Measure to the top of the sediment for each groyne (in three places along the groyne).



groyne

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