|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Goliath Grouper Suction Feeding*** | | | | |
| Time 0 | **Cone A** | **Length (mm)** | **Area ()** | **Volume ()** |
| a | 34.9 | N/A |  |
| b | 153.6 |
| **Cone B** | **Length (mm)** | **Area ()** | **Volume ()** |
| a | 34.9 | N/A |  |
| c | 54.3 |
| d | 6.4 |
| e |  |
| ***Volume of feeding mechanism before expansion (t0)*** | | |  |
| Time 1 | **Cone A** | **Length (mm)** | **Area ()** | **Volume ()** |
| a | 39.5 | N/A |  |
| b | 161.3 |
| **Cone B** | **Length (mm)** | **Area ()** | **Volume ()** |
| a | 39.5 |  |  |
| c | 56.4 |
| d | 32.6 |
| e |  |
| ***Volume of feeding mechanism at maximum expansion (t1)*** | | |  |
| ***Volume change during feeding event ()*** | | | |  |
| ***Duration of feeding event (sec)*** | | | | 0.132 |
| ***Area of mouth at maximum expansion (t1) ()*** | | | |  |
| ***Velocity of water flow into mouth (mm/sec)*** | | | |  |
|  | | | |  |
| ***Goliath Grouper Suction Feeding Answer Key*** | | | | |
| Time 0 | **Cone A** | **Length (mm)** | **Area ()** | **Volume ()** |
| a | 34.9 | N/A | 195,916.4 |
| b | 153.6 |
| **Cone B** | **Length (mm)** | **Area ()** | **Volume ()** |
| a | 34.9 | N/A | 84,297.3 |
| c | 54.3 |
| d | 6.4 |
| e | 12.2 |
| ***Volume of feeding mechanism before expansion (t0)*** | | | 280,213.7 |
| Time 1 | **Cone A** | **Length (mm)** | **Area ()** | **Volume ()** |
| a | 39.5 | N/A | 263,546.5 |
| b | 161.3 |
| **Cone B** | **Length (mm)** | **Area ()** | **Volume ()** |
| a | 39.5 | 3338.8 | 230,990.0 |
| c | 56.4 |
| d | 32.6 |
| e | 266.5 |
| ***Volume of feeding mechanism at maximum expansion (t1)*** | | | 494,536.5 |
| ***Volume change during feeding event ()*** | | | | 214,322.8 |
| ***Duration of feeding event (sec)*** | | | | 0.132 |
| ***Area of mouth at maximum expansion (t1) ()*** | | | | 3338.8 |
| ***Velocity of water flow into mouth (mm/sec)*** | | | | 486.3 |
|  | | | |  |