

## Horned Puffin Chick meals collected on Duck Island in 1997

The table below contains data from 8 puffin chick diet samples. Each sample represents one bill load (a load of fish carried cross-ways in the bill by the parent puffin and delivered to the chick).

The prey species, and lengths and weights of each individual fish are provided.

*Can you answer the following questions?*

- (1) What is the average (mean) number of prey per bill-load?
- (2) What is the minimum number of prey per bill-load?
- (3) What is the average (mean) weight of a bill load?

Chicks were being fed an average of **3 times per day**.

- (4) Take the average (mean) weight of a bill-load, and calculate how much food (in grams) chicks were receiving a day.

Data collected by Ann Harding as part of a research project conducted by the  
USGS Alaska Science Center

<b>Sample #</b>	<b>Species</b>	<b>Length</b>	<b>Weight</b>
1	Sand lance	96	2.59
1	Sand lance	110	4.86
1	Sand lance	106	3.75
1	Sand lance	96	3.03
1	Sand lance	95	2.62
1	Sand lance	116	4.83
2	Sand lance	97	2.81
2	Sand lance	94	2.39
2	Sand lance	102	3.16
2	Sand lance	104	3.26
2	Sand lance	98	2.8
3	Sand lance	128	6.48
3	Sand lance	84	2.22
3	Sand lance	86	2.18
3	Sand lance	93	2.73
3	Sand lance	89	2.54
3	Sand lance	87	2.42
3	Sand lance	88	2.22
3	Sand lance	82	1.8
4	Sand lance	86	2.28
4	Sand lance	82	2.06
4	Sand lance	85	2.27
5	Sand lance	88	2.32
5	Sand lance	72	1.17
5	Sand lance	94	2.64
5	Sand lance	94	2.71
5	Sand lance	83	1.6
5	Sand lance	77	1.41
5	Sand lance	96	2.77
5	Sand lance	91	2.32
6	Sand lance	91	2.45
6	Sand lance	90	2.18

6	Sand lance	97	2.83
6	Sand lance	89	1.92
7	Sand lance	99	3.16
7	Sand lance	90	2.34
7	Sand lance	95	2.77
7	Sand lance	105	3.99
8	Sand lance	71	1.19
8	Sand lance	76	1.6
8	Sand lance	66	1.11
8	Sand lance	69	1.22
8	Sand lance	63	0.98
8	Sand lance	72	1.11
8	Sand lance	68	1.18
8	Sand lance	72	1.16
8	Sand lance	66	0.96
8	Sand lance	77	1.27
8	Sand lance	83	1.46
8	Sand lance	74	1.21
8	Sand lance	73	1.18
8	Sand lance	78	1.57
8	Sand lance	87	1.94
8	Sand lance	75	1.26
8	Sand lance	71	1.27
8	Sand lance	75	1.31
8	Sand lance	76	1.36
8	Sand lance	76	1.43
8	Sand lance	70	1.19
8	Sand lance	95	2.64
8	Sand lance	100	3.24