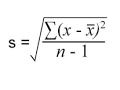
**Salt Marsh Quadrats, Middle vs Low Survey Sheet**

**Area of Transect:** East Head  **Name Date**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Plant Species** | | Middle Marsh | | | | | | | Low Marsh | | | | | | |
| **English Name** | **Scientific name** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Seaweed spp. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cord grass | *Spartina townsendii* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Glasswort | *Salicornia spp.* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Annual Sea Blite | *Suaeda maritima* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sea Aster | *Aster tripolium* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Saltmarsh Grass | *Puccinellia maritima* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sea Purslane | *Halimone portulacoides* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sea Lavender | *Limonium vulgare* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Common Reed | *Phragmites australis* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sea Couch Grass | *Elymus pycnanthus* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **Number of Species** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | | | | | | | |

**This data can now be simplified.** You may need to share results with other groups in order to get many repeats. This will allow you to calculate a reliable mean number of species per quadrat.

The data you have collected can be used to calculate the standard deviation:

[](http://www.google.co.uk/url?url=http://www.statisticshowto.com/what-is-standard-deviation/&rct=j&frm=1&q=&esrc=s&sa=U&ved=0ahUKEwiL4peCk8jNAhWKCMAKHVrqAJAQwW4IJDAE&usg=AFQjCNGgIagEhhMFZBU3nhy0dPyesWdISQ)

|  |  |  |
| --- | --- | --- |
| **Middle** | | |
| **No. of species (x)** | **x- x̅** | **(x- x̅)2** |
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| Mean (x̅) = |  | = |

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| --- | --- | --- |
| **Lower** | | |
| **No. of species (x)** | **x- x̅** | **(x- x̅)2** |
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| Mean (x̅) = |  | = |

You will now have enough information to represent your data as a graph with error bars. When completing your report you should consider the following questions:

* What conclusions can you draw from your results?
* What possible biological explanation is there for your findings?
* How confident are you in the reliability of your conclusions?