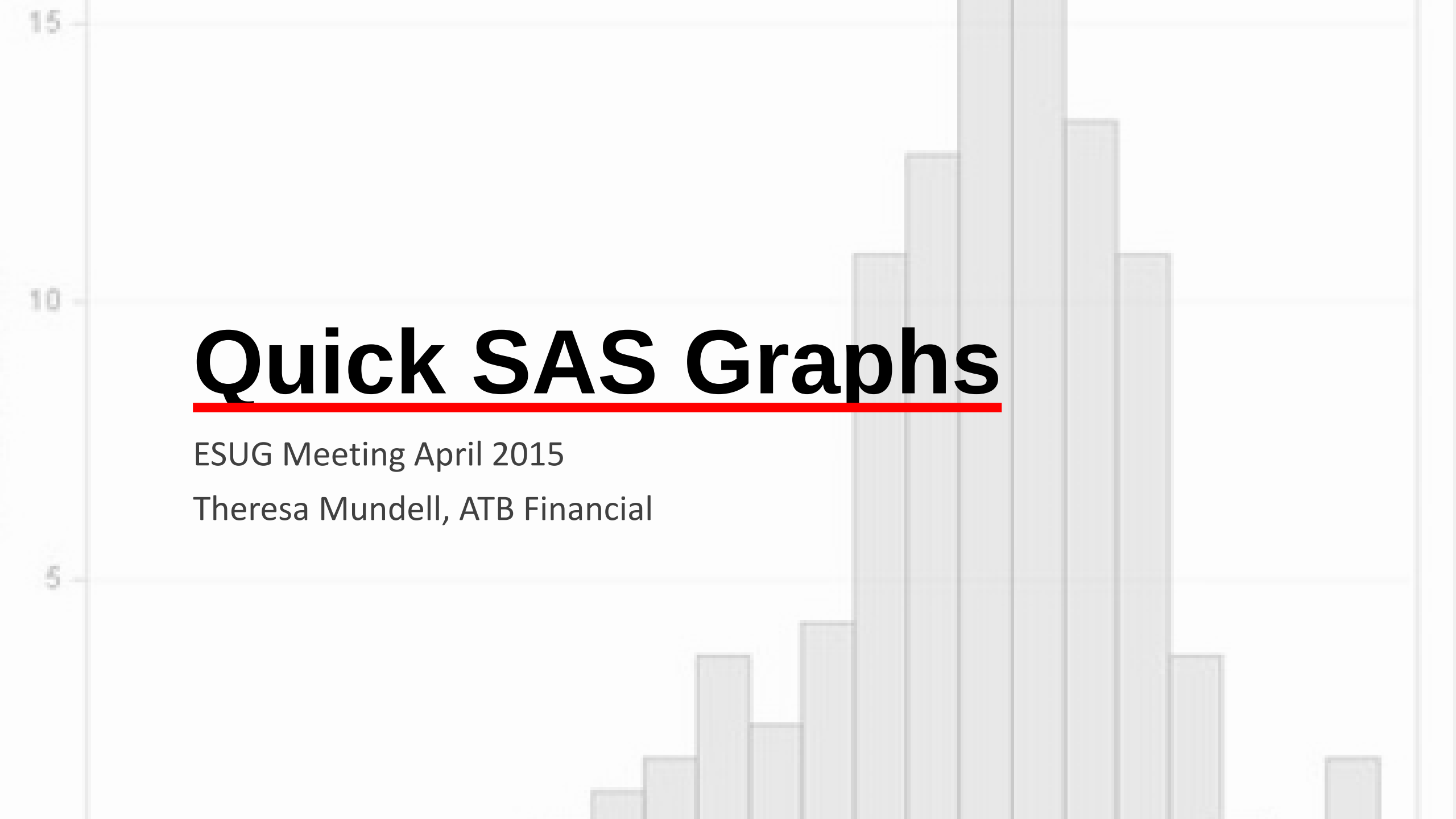

Quick SAS Graphs

ESUG Meeting April 2015

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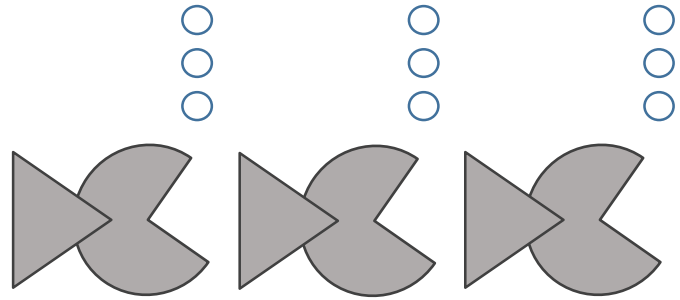
Outline – getting started with SAS Graphs

- Data prep (or not ☺)
- Summary graphs
- Multiple graphs
- Panel graphs
- Extras

Getting started – sashelp.fish

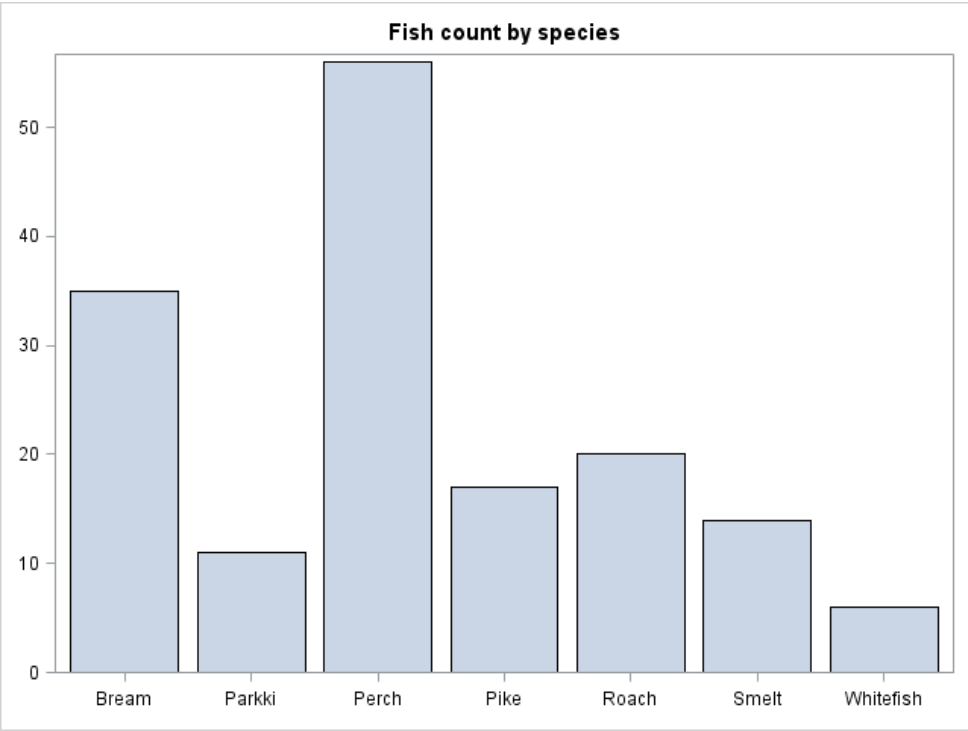
VIEWTABLE: Sashelp.Fish (Measurements of 159 Fish Caught in Lake Laengelmavesi, Finland)

	Species	Weight	Length1	Length2	Length3	Height	Width
1	Bream	242	23.2	25.4	30	11.52	4.02
2	Bream	290	24	26.3	31.2	12.48	4.3056
3	Bream	340	23.9	26.5	31.1	12.3778	4.6961
4	Bream	363	26.3	29	33.5	12.73	4.4555
5	Bream	430	26.5	29	34	12.444	5.134
6	Bream	450	26.8	29.7	34.7	13.6024	4.9274
7	Bream	500	26.8	29.7	34.5	14.1795	5.2785
8	Bream	390	27.6	30	35	12.67	4.69
9	Bream	450	27.6	30	35.1	14.0049	4.8438
10	Bream	500	28.5	30.7	36.2	14.2266	4.9594
11	Bream	475	28.4	31	36.2	14.2628	5.1042
12	Bream	500	28.7	31	36.2	14.3714	4.8146
13	Bream	500	29.1	31.5	36.4	13.7592	4.368
14	Bream	.	29.5	32	37.3	13.9129	5.0728
15	Bream	600	29.4	32	37.2	14.9544	5.1708
16	Bream	600	29.4	32	37.2	15.438	5.58
17	Bream	700	30.4	33	38.3	14.8604	5.2854
18	Bream	700	30.4	33	38.5	14.938	5.1975
19	Bream	610	30.9	33.5	38.6	15.633	5.1338
20	Bream	650	31	33.5	38.7	14.4738	5.7276
21	Bream	575	31.3	34	39.5	15.1285	5.5695
22	Bream	685	31.4	34	39.2	15.9936	5.3704
23	Bream	620	31.5	34.5	39.7	15.5227	5.2801
24	Bream	680	31.8	35	40.6	15.4686	6.1306
25	Bream	700	31.9	35	40.5	16.2405	5.589
26	Bream	725	31.8	35	40.9	16.36	6.0532
27	Bream	720	32	35	40.6	16.3618	6.09
28	Bream	714	32.7	36	41.5	16.517	5.8515
29	Bream	850	32.8	36	41.6	16.8896	6.1984
30	Bream	1000	33.5	37	42.6	18.957	6.603
31	Bream	920	35	38.5	44.1	18.0369	6.3063
32	Bream	955	35	38.5	44	18.084	6.292
33	Bream	925	36.2	39.5	45.3	18.7542	6.7497
34	Bream	975	37.4	41	45.9	18.6354	6.7473
35	Bream	950	38	41	46.5	17.6235	6.3705
36	Roach	40	12.9	14.1	16.2	4.1472	2.268
37	Roach	69	16.5	18.2	20.3	5.2983	2.8217
38	Roach	78	17.5	18.8	21.2	5.5756	2.9044
39	Roach	87	18.2	19.8	22.2	5.6166	3.1746
40	Roach	120	18.6	20	22.2	6.216	3.5742

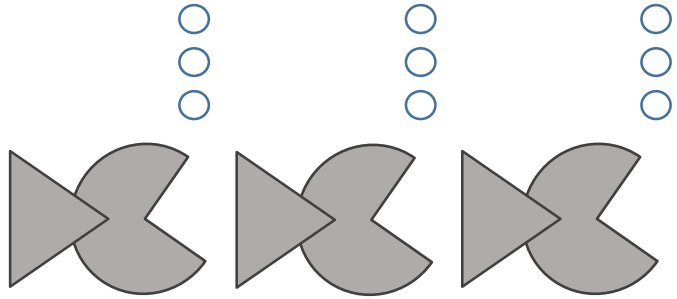


Getting started – summary graphs

```
title 'Fish count by species';
proc sgplot data=sashelp.fish ;
vbar species ;
xaxis display=(nolabel);
yaxis display=(nolabel);
run;
```

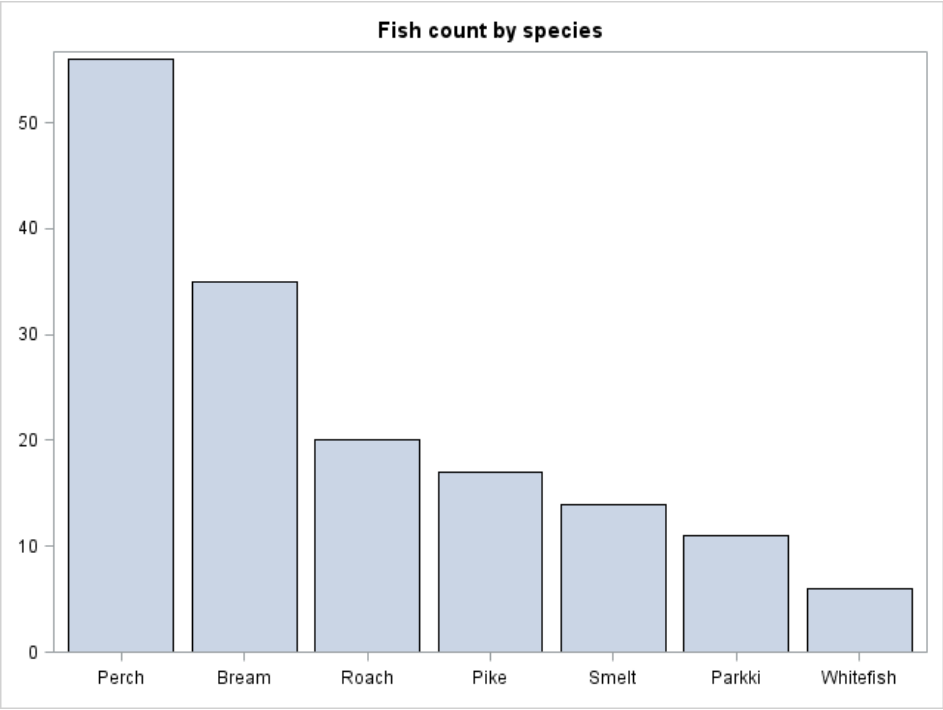


PRO:
No further data summary required to create summary graphs

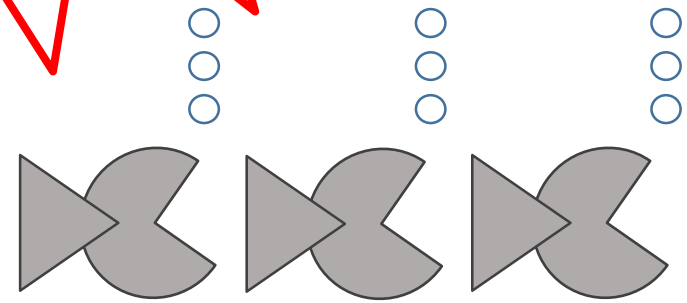


Getting started – summary graphs

```
title 'Fish count by species';
proc sgplot data=sashelp.fish ;
vbar species  ;
xaxis display=(nolabel) values=('Perch' 'Bream' 'Roach' 'Pike' 'Smelt' 'Parkki' 'Whitefish');
yaxis display=(nolabel);
run;
```

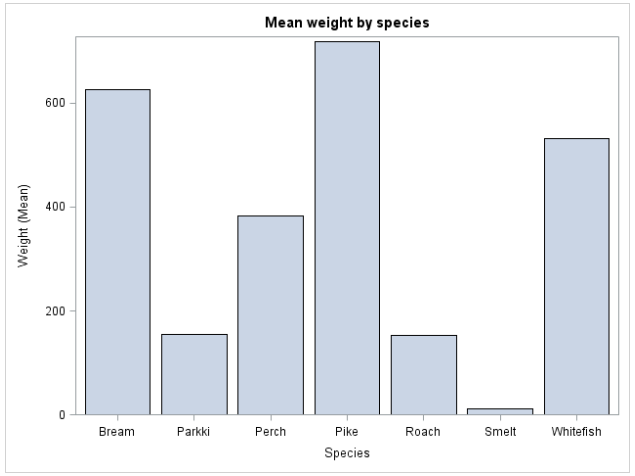


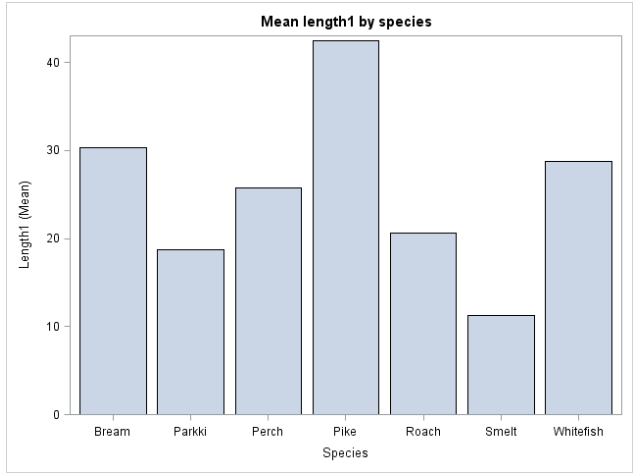
CON:
What if you don't want your categories alphabetical?

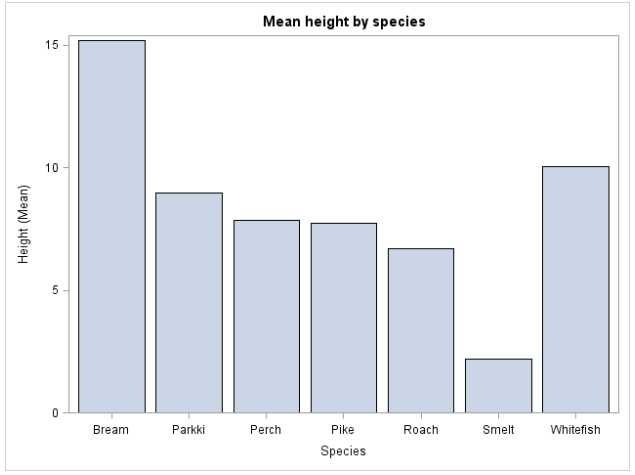


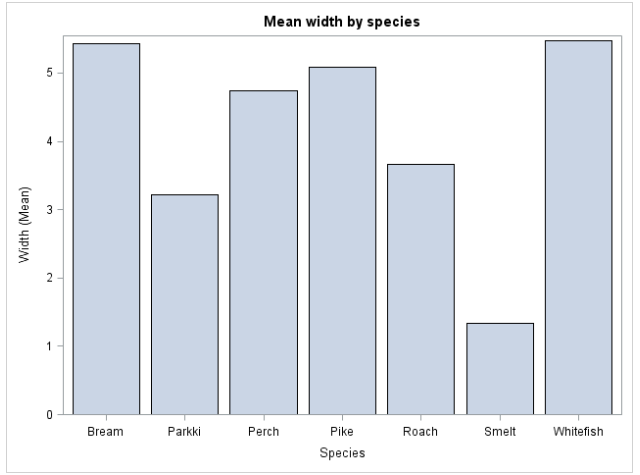
Getting started – multiple graphs

```
%macro quick_mean_graph (data,var,resp);

title "Mean &resp. by &var.";
proc sgplot data=&data. ;
vbar &var. /response=&resp. stat=mean;
run;

%mend;

%quick_mean_graph(sashelp.fish,species,weight);
%quick_mean_graph(sashelp.fish,species,length1);
%quick_mean_graph(sashelp.fish,species,height);
%quick_mean_graph(sashelp.fish,species,width);
```



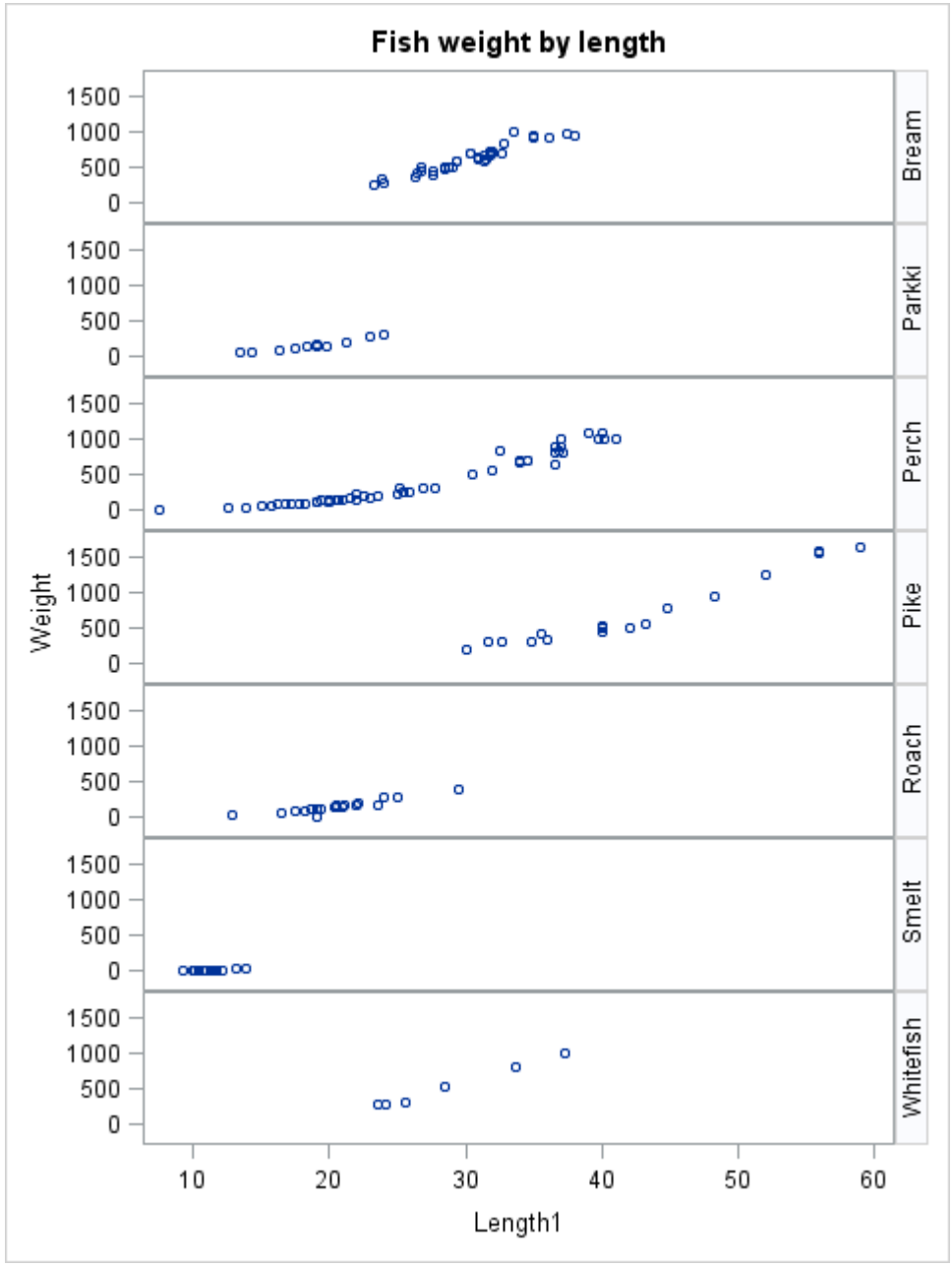






Getting started – panels

```
title 'Fish weight by length';
proc sgpanel data=sashelp.fish;
panelby species / layout=rowlattice onepanel novarname;
scatter x= length1 y=weight;
run;
```



Extras

- Create a point & click graph in SAS Enterprise Guide (keep the code!)
- Don’t limit yourself to the stock formatting
- Lots of online resources

Thank you!