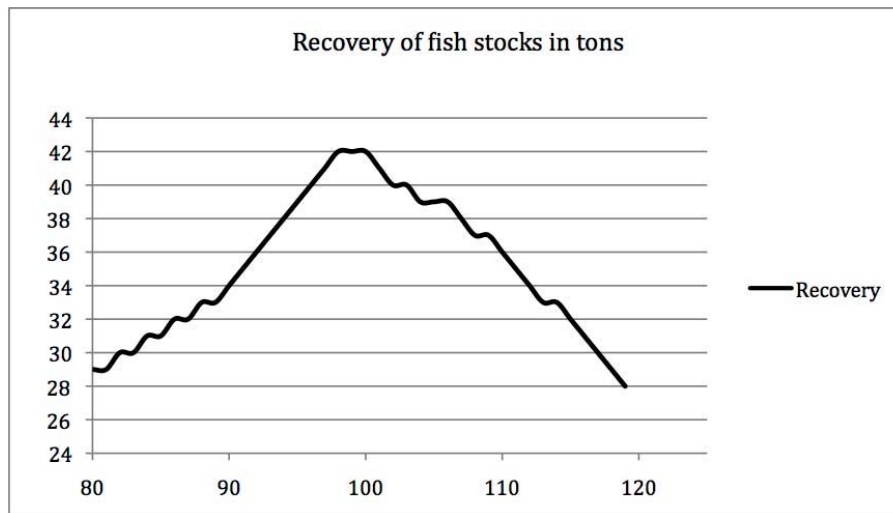


Student handout 4.4

What is the optimum balance between fish reproduction and harvest?

The fish stocks produce larger or smaller quantities of new fish, depending on the amount of fish left in the lake after the fishing season is over. What is the fish stock that delivers the largest amount of new fish? The answer to this question gives the key to sustainable fishing.



Fish stocks at the end of the season in tons

Stock at end of season	Recovery (production of new fish)	Stock at beginning of new season
80	29	109
85	31	116
90	34	124
95	39	134
96	40	136
97	41	138
98	42	140
99	42	141
100	42	142
101	41	142
102	40	142
103	40	143
104	39	143
105	39	144
110	36	146
115	32	147
120	28	148

This table shows the peak recovery rates that the fish stocks are capable of producing. These recovery rates are ideal for sustainable fishing.