

GRAND TETON GUIDE no. 1

AN AMATEUR'S REVIEW OF BACKPACKING TOPICS

FOR THE

2008

T254 EXPEDITION TO GRAND TETONS / YELLOWSTONE

HIGH ALTITUDE PHYSIOLOGY

LOCATION	ELEVATION (ft.)	ATMOSPHERIC PRESSURE $P_B=760(e^{-a/7924})$ (mmHg.)	OXYGEN PRESSURE (= 21% atmospheric pressure) (mmHg.)
Gulf Shores	0	760	160
Birmingham	650	740	155
Cades Cove	1800	710	150
Spence Field	4900	635	133
Newfound Gap	5050	630	132
Clingman's Dome	6643	595	125
Thunderhead	5500	620	130
Jackson Hole	6447	600	126
Yellowstone Lake	7730	570	120
Grant Village	7810	570	120
Old Faithful	7400	580	122
Jackson Lake	6772	590	124
Colter Bay Village	6840	590	124
Jenny Lake	6783	590	124
Inspiration Point	7200	585	123
Fork of Cascade Canyon	7800	560	118
Lake Solitude	9035	540	113
Paintbrush Divide	10700	520	109
Holly Lake	9410	530	111
Hurricane Pass	10400	520	109
Alaska Basin	8900	540	113
Death Canyon Trailhead	6800	590	124
Death Canyon Shelf	9500	530	111
Fox Creek Pass	9560	530	111
Lupine Meadows trailhead	6700	590	124
Surprise Lake	9700	525	110
Mt. Everest	29035	225	47

As can be seen, the areas of the planet that we will visit soon are characterized by lower partial pressures of oxygen than those to which we are accustomed. In addition, bottled oxygen will not be readily available. The levels of exertion which we will sustain daily will be greater than our current averages.

I encourage everyone to engage in physical exercise (walking, as tolerated), **at least 30 min., 4X per week** with goal zone training heart rate of 0.8 X (220 – age) bpm.

4 weeks to go!