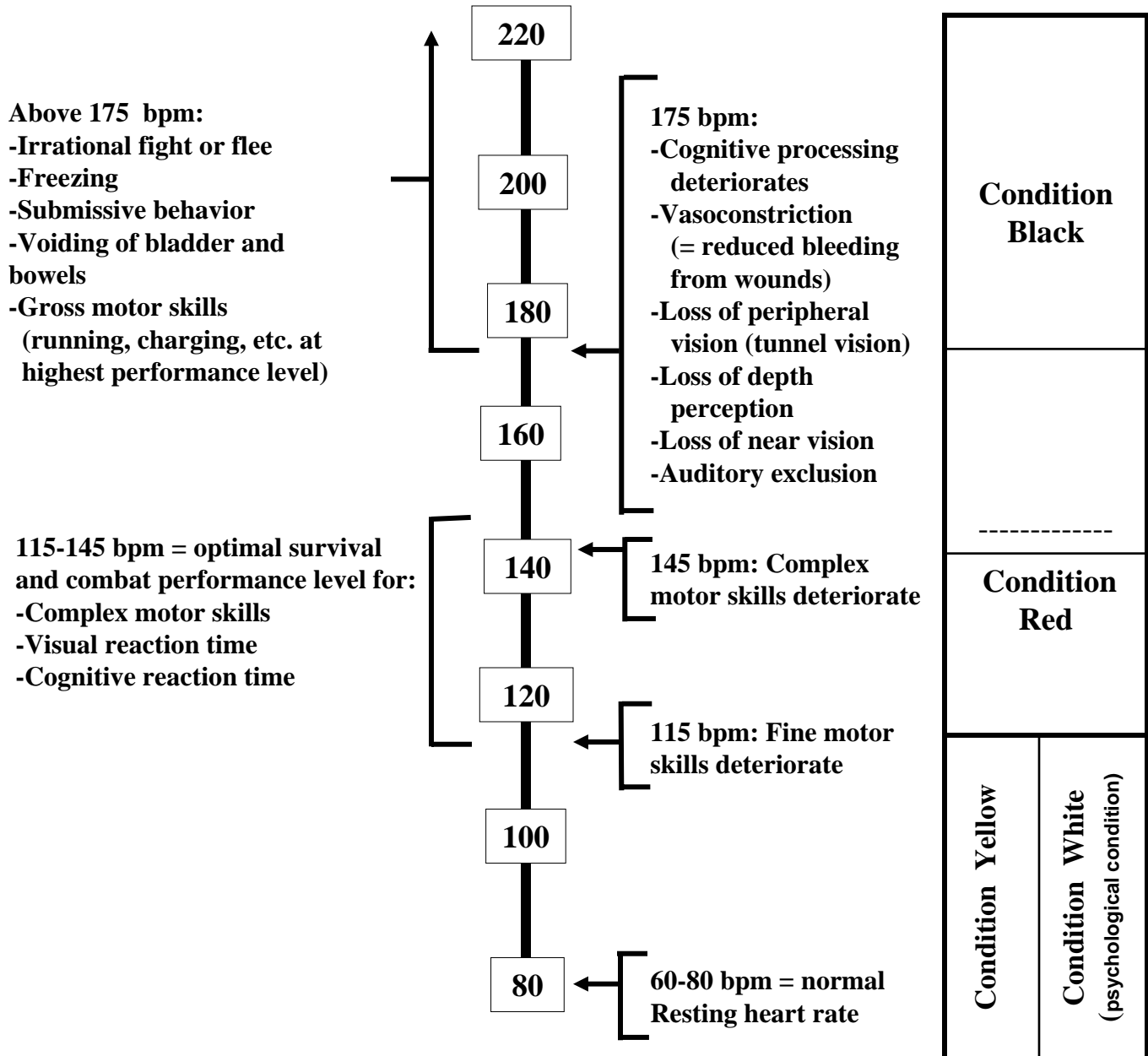


Heart Rate

Beats Per Minute

(Copyright 1997 Siddle & Grossman)



EFFECTS OF HORMONAL OR FEAR INDUCED HEART RATE INCREASE

Notes:

1- These data are for hormonal or fear induced heart rate increases resulting from sympathetic nervous system arousal. Exercise induced increases will not have the same effect.

2-Hormonal induced performance and strength increases can achieve 100% of potential max within 10 seconds, but drop 55% after 30 seconds, 35% after 60 seconds, and 31% after 90 seconds. It takes a minimum of 3 minutes of rest to "recharge" the system.

3- Any extended period of relaxation after intense sympathetic nervous system arousal can result in a parasympathetic backlash, with significant drops in energy level, heart rate and blood pressure. This can manifest itself as normal shock symptoms (dizziness, nausea and/or vomiting, paleness, clammy skin) and/or profound exhaustion.