long plagued scientists. Why do weâĢĶand in fact every other animal with a nervous systemâĢĶspend such large portions of our day sleeping? After all, there are so many other aspects of life that need our attention. Studies have suggested that sleep may function to consolidate memories, help us solve difficult problems, and boost our immune system. However, thereâĢĻs still no conclusive answer to why sleep is so vital.ĊThis week, one hypothesis is gaining ground. It suggests that sleep is a âĢľstate of adaptive inactivityâĢĽ that conserves energy when activity is either not required or is not particularly advantageous.ĊIn the most recent issue of Science, a group of scientists from the Max Planck Institute for Ornithology tested this theory by looking at a system where near-constant activity, and therefore a lack of sleep, might benefit fitness. In pectoral sandpipers, male fitness is determined by access to females, and at the high Arctic latitudes in which these birds live, extremely long days enable males to engage in near-constant mating displays during periods of high female fertility. If giving up sleep to spend more time wooing potential mates increases the reproductive success of males, sleep in this species might depend more on the value of wakefulness, rather than the benefits of resting