



External Colony Counts-Protocols (taken from nabatmonitoring.org)

1. Establish a survey sample design. If it is practical to monitor all known colonies in a region each season, it may be most appropriate to continue monitoring all colonies. Alternatively, [GRTS cell selection protocol](#) can be used to prioritize monitoring when colony prevalence exceeds monitoring resources in a region.
2. Assess whether an external colony count will result in accurate estimates at a roost. Emergence counts are appropriate when all roost exits are known and can be monitored simultaneously. Conditions must allow individual emerging bats to be identified; additionally, species compositions and relative abundances of the roost must be known beforehand.
3. Conduct surveys. Emergence counts are most productive during late pregnancy or early lactation, prior to young becoming volant. Performing two-three emergence counts during this period typically produces reliable data. In most scenarios, it is appropriate to begin monitoring a roost 30 minutes before sunset and continue at least 10 minutes after the last bat emerges or until it is too dark to see. However, larger colonies may emerge in pulses with periods > 10 minutes between emerging bats.

For more information, visit <https://www.nabatmonitoring.org/collect-data>