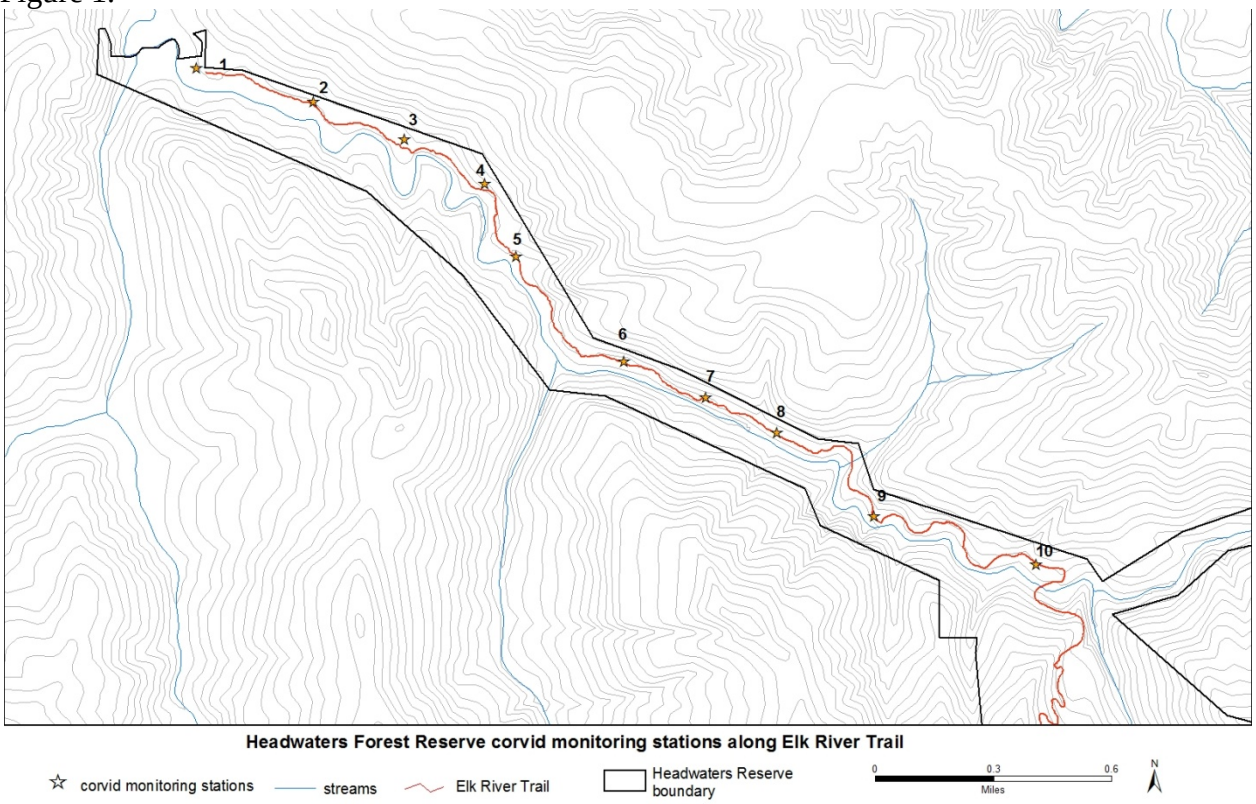
Corvid presence along the Elk River Trail in the BLM,

Headwaters Forest Reserve – year 2019

Survey Objectives: The year 2019 represented the 17th year that the Elk River Trail within the Headwaters Forest Reserve was surveyed for corvid presence. From 2001 through 2015 surveys were completed annually and after 2015, biannually. The family of birds identified as corvids are surveyed within the Reserve because they are known to prey upon marbled murrelet eggs and chicks. The most common corvids present along the trail are Stellar's jays (*Cyanocita stelleri*) (jays) and common ravens (*Corvus corax*)(ravens). Occasionally an American crow (*Corvus brachyrhynchos*) or a Canada (gray) jay (*Perisoreus canadensis*) is present during a survey but their presence has been so seldom that these two species are not analyzed in the results. Marbled murrelets (*Brachyramphus marmoratus*) are listed as threatened under the Endangered Species Act and utilize the nesting habitat found in the Reserve. These surveys are designed to document any trends in corvid abundance through the years. Human presence and their garbage along the trail or management activities within the Reserve may increase corvid abundance which could be detrimental to the recovery success of the marbled murrelet.

Survey Methods: There are ten survey stations along the first 3 miles of the trail (Figure 1) and each station is surveyed six times per year from mid-May through mid-August. Each station is surveyed for 10 minutes with any vocalization or visual observation counted equally as one detection. Care is taken not to double count birds.

Figure 1.



Survey Results: Jays are the most abundant corvid species present along the trail and ravens occasionally present. Figures 2 and 3 indicate the mean number of jays and ravens surveyed through the 17 years. Generally jays had maintained 1.5 to 2 birds per station per year from 2001 through 2010 but then a reasonably steep decline over the entire survey route occurs from 2011 through 2019.

Raven abundance was reasonably consistent from 2002 through 2007. Year 2008 revealed a sharp decrease in ravens with a consistent recovery in presence occurring from 2009 through 2015 then the start of a decline. There may be many factors that influence the decreases or increases in the presence of these two species along the Elk River Trail.

Figure 2.

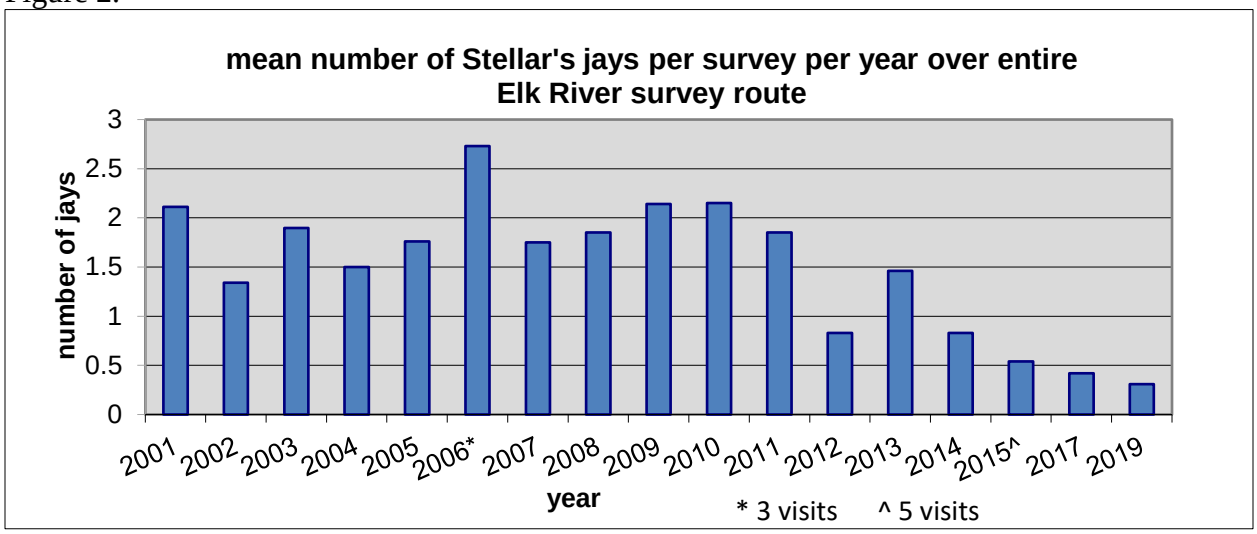
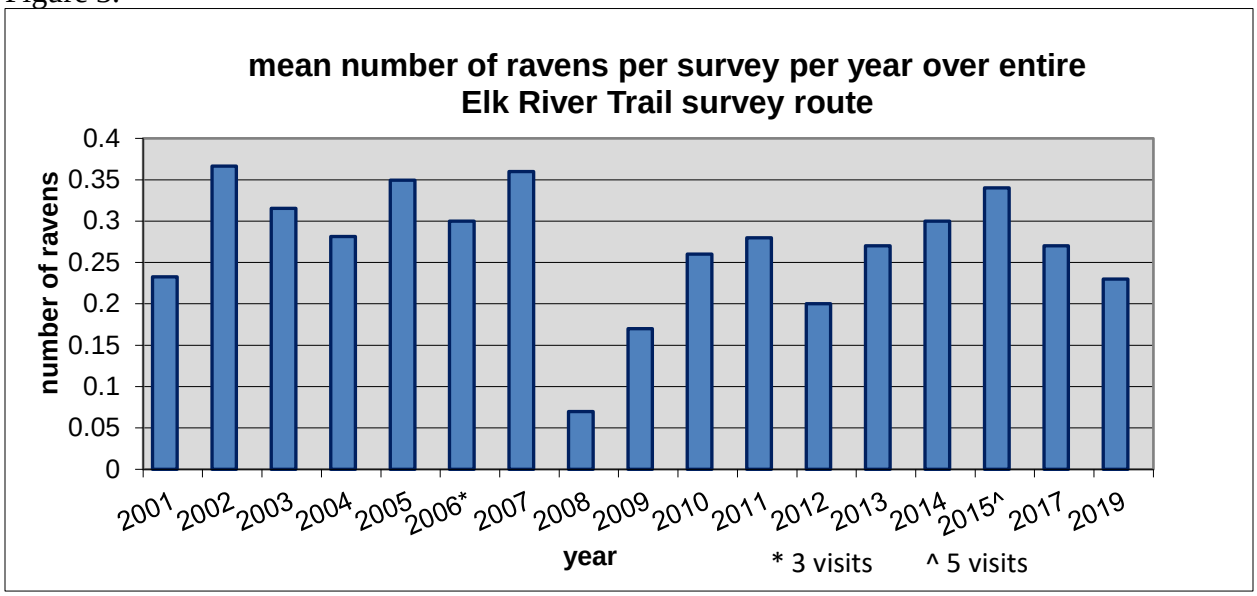


Figure 3.



Results for each survey station indicate that station 1, which is located at the parking lot and trailhead, has the greatest presence of jays and ravens (Figures 4 and 5). This greater abundance

could be attributed to the human and vehicle activity at the parking area but there are also residences very close to the parking area that may also influence this abundance.

Figure 4.

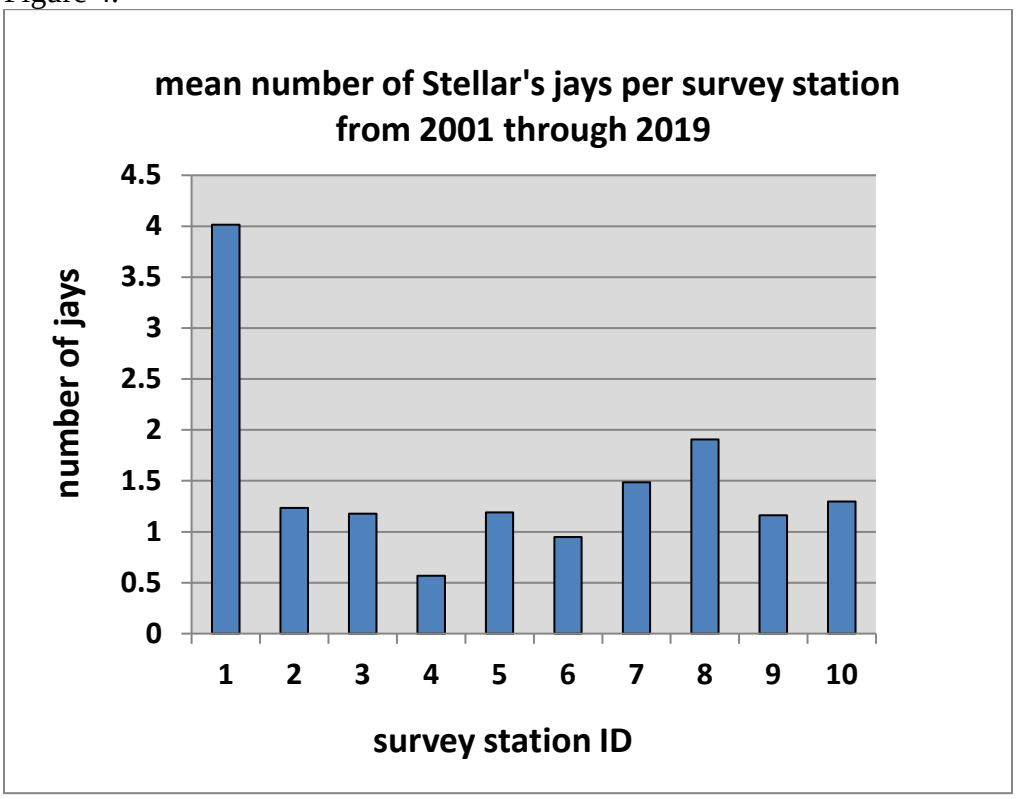
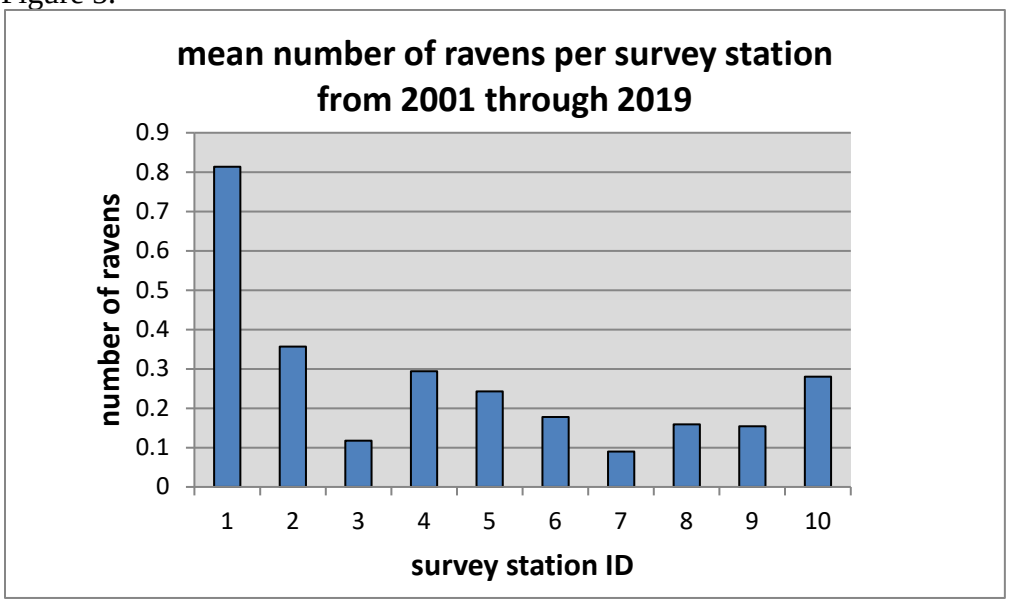



Figure 5.