Results from Passive and Broadcast Surveys for Black-Backed and Three-Toed Woodpeckers

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Black-backed and Three-toed Woodpeckers are inconspicuous, relatively uncommon species that are frequently associated with, and may even depend on, burned forest. Obtaining sufficient sample sizes in order to understand the pre and post-fire conditions needed by these and other fire-dependent species is a persistent problem, and so in 2005 we used both passive and broadcast acoustical surveys to detect woodpeckers. Passive surveys consisted of 10-minute point counts and broadcast surveys consisted of playing the drum and call sequence for both Black-backed and Three-toed Woodpeckers. We visited forested areas burned by 15 individual fires in the late summer of 2003 on four National Forests and Glacier National Park. We detected a total 190 Black-backed Woodpeckers and 229 Three-toed Woodpeckers across 1388 sampled points. While Black-backed and Three-toed Woodpeckers were detected on a similar proportion of points surveyed with either point counts or broadcast surveys, both species were detected on a higher proportion of points at the subset of 241 points where we

conducted both types of surveys. Further, at those points where we first conducted a point count and then followed up with a broadcast survey, over 50 percent of detections were picked up only by the playback survey. These results suggest that broadcast survey do increase the likelihood of detecting these rare woodpeckers, when they are present.