BIO-ENERGETIC VALUE OF THE FLATHEAD AND SMITH VALLEYS IN NORTHWEST MONTANA FOR SPRING WATERFOWL MIGRATION

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The abundance of lakes, rivers, streams, wetlands, and agricultural lands of the Flathead and Smith Valleys in northwest Montana attracts a significant number of migratory waterfowl moving from wintering grounds to breeding habitats each spring. These diverse habitats provide food and resting areas for thousands of waterfowl and other waterbirds each year. These valleys are also undergoing rapid habitat transformation due to growth in human population with concomitant conversions from rural agricultural and riparian habitats to more residential and commercial development. To quantify the current extent, distribution, importance, and species that use this area as a spring stopover, we initiated a randomly stratified, weekly, simultaneous waterfowl survey of selected areas from early March through April. We began in spring 2010 and will continue through spring 2012. The data will be extrapolated to the entire study area and for the 2-month period to develop an estimate of total annual waterfowl feeding days by species. Habitat data are also being incorporated. Preliminary results from first 2 years of data indicate that the 4 most common migrant waterfowl species, in order of total numbers counted, are Mallard, Northern Pintail, Canada Goose, and American Wigeon. Preliminary extrapolations of waterfowl survey data in terms of bioenergetics will be summarized.