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**Anushaya Mohapatra\*** (iitmmanu@gmail.com), 1237 NW 23rd Street Apt 10, Corvallis, OR 97330, and **Haley Ohms, Dave Lytle** and **Patrick De Leenheer**. *Population Models with Partial Migration*.

We discuss several discrete-time population models to investigate the coexistence of migrants and residents. We study both linear and non-linear model, density dependence effects are incorporated by non-linear models. The asymptotic dynamics is determined in terms of the value of a locally defined basic reproduction number: If it is less than one, then the entire population goes extinct, whereas it settles at a unique fixed point consisting of a mixture of residents and migrants, when it is larger than one. Thus, the value of the basic reproduction number can be used to predict the stable coexistence or collapse of populations exhibiting partial migration. (Received September 21, 2015)