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we consider an amphibian juvenile-adult population migrating between multi-ponds. We assume that juveniles are structured by age and adults are structured by size. This leads to a system of first order nonlocal hyperbolic equations. A finite difference approximation to this system is developed. Existence-uniqueness of the weak solution to the system is established and convergence of the finite difference approximation to the unique solution is proved. (Received September 15, 2009)