1077-60-1957 Paul H Bezandry* (pbezandry@howard.edu), 2441 6th Street, NW, Washington, DC 20059, Toka Diagana (tdiagana@howard.edu), 2441 6th Street, NW, Washington, DC 20059, and Saber Elaydi (selaydi@trinity.edu), One Trinity Place, San Antonio, TX 78212. On the Stochastic Beverton-Holt Difference Equation with Survival Rates.

We consider a stochastic Beverton-Holt difference equation, in which both the recruitment function and the survival rate vary randomly. In this talk we develop a basic theory of mean almost periodic random sequences on \mathbb{Z}_+ and provide a method to constructing mean almost periodic random sequences on \mathbb{Z}_+ . These techniques are, subsequently, used to find some sufficient conditions for the existence and uniqueness of a mean almost periodic solution of the Beverton-Holt equation. (Received September 21, 2011)