1145-39-1032     **Robert J Sacker\*** (`rsacker@usc.edu`), University of Southern California, Mathematics Department KAP 104, 3620 S Vermont Ave, Los Angeles, CA 90064. *Bifurcation in the Almost Periodic Ricker Map.* Preliminary report.

It was shown in an earlier publication that the Ricker equation with Almost Periodic coefficient with finitely generated frequency module and with average value lying in $(0,2)$ has Almost Periodic solutions lying on a torus $\mathcal{T}$ of the same dimension as the (finite) number of independent generators of the frequency module of the coefficient. The hull $H$ of the coefficient is itself a torus homeomorphic to $\mathcal{T}$ and isomorphic to $\mathcal{T}$ as an Abelian group.

In this paper we find a bifurcation function and show that if the magnitude of the oscillatory part of the coefficient is increased and the average part is then increased above a bifurcation curve a pair of tori bifurcate, each of which is invariant under the composition of two Ricker maps in sequence and enjoys all the properties as in the pre-bifurcation case. In addition we show all the tori discussed above are $C^1$ smooth.

It is also surprising to notice that the stability interval $(0,2)$ is increased as the magnitude of the oscillatory part of the coefficient is increased. Finally the case of a frequency module that is infinitely generated is treated. (Received September 18, 2018)