1099-53-198Owen Dearricott* (owen.dearricott@gmail.com), 18 Castles Crescent, Kyneton, Victoria,
3444, Australia. Quaternion-Sasakian manifolds and reduction.

An n-Sasakian manifold is a Riemannian manifold foliated by equidistant n-dimensional leaves such that the Riemann tensor is that of a curvature one space form on any triple of vector fields the include a field every tangent to the leaves of the foliation. Such manifolds are intimately connected to the parallel even Clifford orbifolds of Moroianu and Semmelmann.

We discuss an analogue of 3-Sasakian reduction in this setting. It turns out in this general setting actions amenable to reduction are somewhat sparse. However the Quaternion-Sasakian case (n=3) have a rich supply that include inhomogeneous examples, reduction in this case closely ties back in with the 3-Sasakian reduction of Boyer, Galicki and Mann. We also touch on some examples of 7-Sasakian circle reduction. (Received February 08, 2014)