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We describe joint work with Rosa Miró-Roig and Uwe Nagel. Let R be a polynomial ring over a field K with the usual grading. An Artinian graded algebra has the Weak Lefschetz Property (WLP) if multiplication by a general linear form, from any component to the next, has maximal rank. In characteristic zero it's known that monomial complete intersections in any number of variables have WLP, as does *every* complete intersection in three variables. Migliore and Miró-Roig asked if every almost complete intersection has WLP. This was answered negatively, for characteristic zero, by Brenner and Kaid (BK) with a simple monomial example, again in three variables. Both results in three variables were obtained by studying the corresponding syzygy bundles. Here we describe a different approach that does not require characteristic zero, and we generalize the BK results in two directions: first, a directly analogous example in any number of variables is shown to fail WLP, regardless of the choice of the field K . Second, we study monomial almost complete intersections, especially in the level case, for three variables. We reduce the WLP question to one of the vanishing of a certain determinant, and as a result the characteristic of the ground field plays a surprising role. (Received January 26, 2009)