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Boca Raton, FL 33431, and Jason Boynton (jboynto5@fau.edu), Department of Mathematical
Sciences, 777 Glades Road, Boca Raton, FL 33431. The n-generator property in rings of
integer-valued polynomials.

Let D be an integral domain with field of fractions Q, let E be a non-empty finite subset of D, and set $Int(E, D) = \{f \in Q[X] : f(E) \subseteq D\}$, the ring of integer-valued polynomials on D with respect to the subset E. We say that the ring R has the *n*-generator property if each finitely generated ideal of R can be generated by a list of n elements, and we say that R has the strong n-generator property if each finitely generated ideal of R can be generated by a list of n elements in which the first generator in the list is an arbitrary non-zero element of the ideal.

Chapman, Loper, and Smith showed that Int(E, D) has the strong 2-generator property if and only if D has the 1-generator property (that is, D is a Bezout domain). Inspired by their result, we prove that, for any integer $n \ge 2$, Int(E, D) has the strong (n + 1)-generator property if and only if Int(E, D) has the *n*-generator property if and only if D has the *n*-generator property. (Received February 06, 2006)