

MIZELL STEVEN  
 Form 4  
 March 19, 2007

**FORM 4**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
 Washington, D.C. 20549**

OMB APPROVAL

OMB Number: 3235-0287  
 Expires: January 31, 2005  
 Estimated average burden hours per response... 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
**MIZELL STEVEN**  
  
 (Last) (First) (Middle)  
**800 N. LINDBERGH BLVD.**  
  
 (Street)  
**ST. LOUIS, MO 63167**  
  
 (City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol  
**MONSANTO CO /NEW/ [MON]**  
  
 3. Date of Earliest Transaction (Month/Day/Year)  
**03/15/2007**  
  
 4. If Amendment, Date Original Filed (Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer  
  
 (Check all applicable)  
 \_\_\_ Director \_\_\_ 10% Owner  
 Officer (give title below) \_\_\_ Other (specify below)  
**Sr. VP Human Resources**  
  
 6. Individual or Joint/Group Filing (Check Applicable Line)  
 Form filed by One Reporting Person  
 \_\_\_ Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Ownership (Instr. 4)
			Code	V Amount (A) or (D) Price			
Common Stock	03/15/2007		M <sup>(1)</sup>	7,080 A \$ 16.4575	39,189	D	
Common Stock	03/15/2007		S <sup>(1)</sup>	7,080 D \$ 53.15	32,109	D	
Common Stock					970	I	By 401(k) Plan

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

**Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control**

SEC 1474 (9-02)

number.

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)
Option (Right to Buy)	\$ 16.4575	03/15/2007		M <sup>(1)</sup>	7,080	05/15/2005 <sup>(2)</sup> 05/15/2014	Common Stock 7,080

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
MIZELL STEVEN 800 N. LINDBERGH BLVD. ST. LOUIS, MO 63167			Sr. VP Human Resources	

## Signatures

Christopher A. Martin,  
Attorney-in-Fact

03/19/2007

\_\_Signature of Reporting Person Date

## Explanation of Responses:

- \* If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) The sale and stock option exercise reported on this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the Reporting Person on October 24, 2006.
- (2) One-third of the options became exercisable on May 15, 2005, one-third of the options became exercisable on March 15, 2006 and one-third of the options became exercisable on March 15, 2007, subject to the terms and conditions of the Monsanto Company Long Term Incentive Plan.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.