

#### **4. Short-Dated Options Strategies**

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#### **Abstract/Summary**

*Short-dated crop options provide a shorter tenor alternative for hedging corn and soybeans. Short-dated crop options offer enhanced hedging flexibility during the growing season. Because these options expire earlier than the traditional options, they allow hedgers to manage risk and take advantage of hedging opportunities at a relatively lower cost.*



## Short-Dated New Crop Options Strategies

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## Agricultural Commodity Options

- Options grants the right
- But not the obligation
- To buy or sell a futures contract
  - At a predetermined price
  - For a specified period of time

## Strike Price

- The predetermined price of the futures contract
- Price at which the futures contract can be bought or sold

## Premium

- The cost of the right to buy or sell a futures contract
- The buyer loses the premium regardless of whether the option is used or not

## Options are Popular because:

- Price insurance
- Limited financial obligation
- Marketing flexibility

## Two Types of Options

- Put option
  - Gives buyer the right to sell a futures contract
  - Provides protection against falling prices
  - Sets a minimum price target
- Call option
  - Gives buyer the right to buy a futures contract
  - Protects against rising prices
  - Allows participation in seasonal price rises

## Components of Premium

- Intrinsic value
  - Difference between the strike price of the option and the price of the underlying futures contract
- Time value
  - Length of time to option expiration
- Premium = Intrinsic value + Time value

## Intrinsic Value

- Positive difference between the strike price and the underlying futures price
- For a put option – strike price above futures price
- For a call option – strike price below futures price

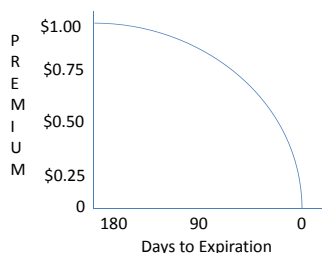
## Time Value

- Portion of option premium resulting from length of time to expiration
  - Expiration is the date on which the rights of the option holder expire
- Decreases with length of time until expiration
- Increases as price volatility of the underlying futures contract increases

## Components of Time Value

- Time
- Volatility
- Interest rates
- Underlying futures price
- Strike price

## Time Decay



## Reasons why a Producer might buy Options

- | Action        | Reason  |
|---------------|---|
| • Buys a Put  | • Needs price protection (floor) for crops              |
| • Buys a Call | • Needs price protection (ceiling) on feed requirements |
| • Buys a Call | • Has sold crops and believes prices are going to rise  |

# Options Worksheet

## Put

- Strike price
- Expected basis
- Premium
- Commission
- = Expected minimum net price

## Call

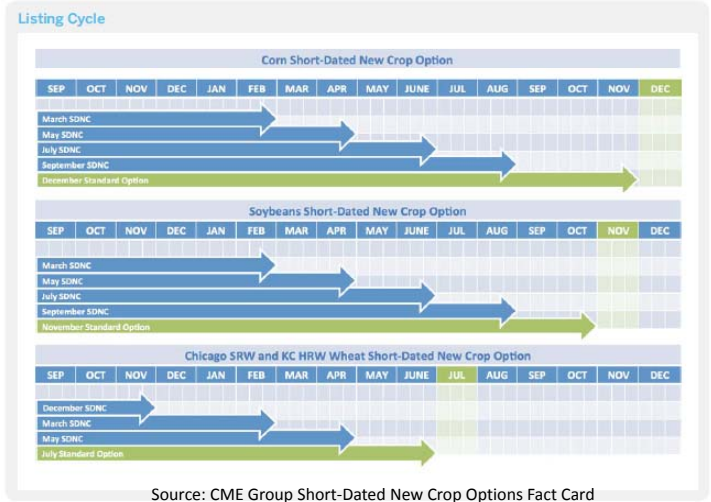
- Strike price
- Expected basis
- + Premium
- Commission
- = Expected maximum net price

# Short-Dated New Crop (SDNC) Options?

- Compared to standard options SDNC options provide
  - Lower time value
  - Lower premiums
- Because they expire earlier than the standard options
- In all other ways SDNC options are identical to standard options

Listed Contract Months		
Short-Dated New Crop Option	Underlying Futures Contract	Listed Contract Months
Corn	December	March, May, July, September
Soybeans	November	March, May, July, September
Chicago SRW Wheat	July	December, March, May
KC HRW Wheat	July	December, March, May

A new listing cycle will begin on the first trading day following the expiration of the next September (May) option.

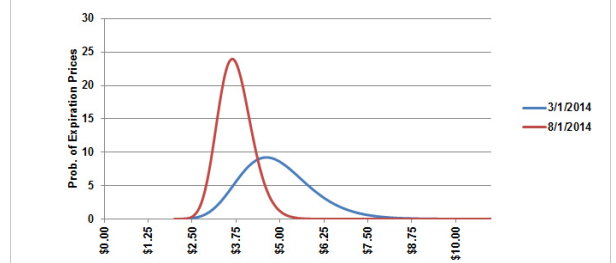


## Comparing Short-Dated and Standard Options on December Corn

	Short-Dated New Crop Option				Standard Option
	March 4.50 Put Option	May 4.50 Put Option	July 4.50 Put Option	September 4.50 Put Option	December 4.50 Put Option
December Futures Prices	\$4.50	\$4.50	\$4.50	\$4.50	\$4.50
Approximate At-the-Money Option Premium	9 cents	15 cents	23 1/2 cents	31 1/2 cents	37 cents
Approximate Protection Period Expiration Date	35 Days 2/21/2014	98 Days 4/25/2014	154 Days 6/20/2014	217 Days 8/22/2014	308 Days 11/21/2014

Source: CME Group Short-Dated New Crop Options Fact Card

Figure 3. Expected Corn Price Distributions, beginning of March and August



Source: FarmdocDaily Updated Price Distributions for Corn and Soybeans in 2014

## Protection when you need it most

- Cover out-of-pocket costs until crop insurance is available
  - Buy [March SDNC Put](#) for corn and soybeans
  - Buy [December KC SDNC Put](#) for winter wheat

## Protection when you need it most

- Assume you hedged or forward contracted your crop
- Protect against weather market through the growing season
  - Buy a [September SDNC Call](#) for corn and soybeans
  - Buy a [May KC SDNC Call](#) for winter wheat