

Canada-Alberta AgrilInsurance Products

CORN HEAT UNIT INSURING AGREEMENT

For 2022 Annual Crops



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CORN HEAT UNIT INSURING AGREEMENT

AFSC will indemnify the Insured against Annual Corn Heat Units being less than the Threshold Corn Heat Units elected by the Insured, at a Selected Weather Station for the Insured's Grain Corn or Silage Corn, pursuant to this Insuring Agreement. This Insuring Agreement incorporates by reference, and is subject to, the Terms and Conditions and Benefits. The definitions in the Terms and Conditions will apply unless the same term is otherwise defined in this Insuring Agreement.

Corn Heat Unit Insurance is an area-based program which provides protection against a lack of heat for irrigated corn. Actual production of corn on the farm does not affect a claim payment.

ARTICLE 1. DEFINITIONS

"Insurable Crop" means Grain Corn or Silage Corn.

"Annual Corn Heat Units" means the accumulated Corn Heat Units at the Selected Weather Station for the current year.

"Corn Heat Units" means an energy term calculated from daily maximum and minimum temperatures and accumulated from May 15. The accumulation of Corn Heat Units stops on the earlier of:

- a. the first day on which the minimum temperature of minus two Celsius or less occurs after 700 Corn Heat Units have accumulated, or
- b. September 30.

"Designated Peril" the Designated Perils listed under Article 1 of the Terms and Conditions do not apply to this Insuring Agreement. Rather it is based on the difference between the Threshold Corn Heat Units and the Corn Heat Units for the current year, with a provision for late frost in the spring.

"Dollar Coverage per Acre" means the amount of Coverage, elected by the Insured in \$25 increments from a minimum of \$100 to a maximum value set annually by AFSC.

"Grain Corn" means corn seeded for grain production.

"Payment Rate" means the rate of compensation at which the Insured is indemnified, as determined by AFSC.

"Silage Corn" means corn seeded for silage production.

"Selected Weather Station" means an eligible weather station elected by the Insured and approved by AFSC.

"Threshold Corn Heat Units" means the total Corn Heat Units, assigned by AFSC at the high and low threshold options for the Weather Station, below which insurance payments begin.



ARTICLE 2. SPECIFICATIONS

Insurable Crop	Designated Grade	End Uses Corn Heat Unit (CHU)	Insurable under Dryland (Dry) Irrigated (Irr)	Reseeding Benefit (\$ per acre) Minimum 10 acre blocks	Insurable Risk Area (RA) Restrictions All maps displaying eligible insuring areas are located on afsc.ca	Seeding Deadline Crops seeded after this date are not insurable	Recommended Seeding Date Crops seeded past this date may not be eligible for Quality Loss
Grain Corn	N/A	CHU	Irr	N/A	See Corn Area Map	May 15	N/A
Silage Corn	N/A	CHU	Irr	N/A	See Corn Area Map	May 31	N/A

2.01 Dollar Coverage

The Insured must select the Dollar Coverage per Acre in increments of \$25 from a minimum of \$100 per acre to a maximum value set annually by AFSC using the Spring Insurance Prices for grain corn and commercial barley for silage.

2.02 Coverage Restriction

AFSC will use daily maximum and minimum temperatures provided by the Alberta Government ministry responsible for Agriculture, or by Environment Canada at all weather stations approved by AFSC for this Insuring Agreement. If AFSC is not able to do the assessment due to insufficient data being provided, this Insuring Agreement will cease to be enforceable against AFSC and cease to have any effect against AFSC. AFSC will then return to the Insured all paid Premium.

2.03 Corn Heat Units Formula

Corn Heat Units are calculated from temperature measured at the insurable weather stations on a daily basis beginning on May 15. Corn Heat Units for the growing season are the total of the daily calculations. After a minimum of 700 corn heat units have accumulated, usually by late June, the daily calculations continue to accumulate until the earlier of the first killing frost, defined as a temperature of less than or equal to -2°C, or September 30.

The Celsius-based formula used to calculate daily Corn Heat Unit is:

$$[1.800 (C1 - 4.4) + 3.330 (C2 - 10) - 0.084 (C2 - 10)^2] \div 2$$

Where:

- C1 is the daily Celsius minimum temperature (set at 4.4 if C1 is less than 4.4); and
- C2 is the daily Celsius maximum temperature (set at 10 if C2 is less than 10).
- The lowest daily value for a CHU is 0.

2.04 Irrigation Coverage

- a. Insurable Crop(s) grown on irrigated land must meet the following conditions:
 - i. those crops are declared as irrigated;
 - ii. there is an adequate source of water;
 - iii. the Insured has reliable irrigation equipment;
 - iv. adequate irrigation water is applied on a timely basis; and
 - v. the Insured maintains an up-to-date log showing the dates and approximate amounts of rainfall and irrigation water applied to each Insured Crop.

2.05 Pricing

- a. **Spring Insurance Price:** In the spring, AFSC forecasts expected crop prices for the coming crop year, and for this Insuring Agreement, it is equal to the Spring Insurance Price for grain corn (2CW) for grain corn CHU, and barley (1CW) for silage corn CHU.
- b. **Fall Market Price:** In the fall, AFSC reviews the pricing using specific methodologies, as described in the table below to determine whether the crop's Fall Market Price is substantially lower or higher than the Spring Insurance Price and sets fall prices accordingly.
- c. **Variable Price Benefit:** is offered to protect against price fluctuations between the Spring Insurance Price and the fall price. Refer to the Benefits document for information.

Variable Price Benefit triggers when the fall price of an eligible crop increases by a minimum of 10 percent above the Spring Insurance Price, and compensates when the Policy has received an Indemnity.

Market Price Methodology Table

In the event that price information originating from published fall price methodology for an Insurable Crop(s) is not available or stops being available during the Fall Market Price period, at its best discretion, AFSC maintains the right to develop and implement an alternate price methodology for Fall Market Price determination to replace or augment pricing for that crops(s) in that year.

Insurable Crop * (Grade)	The methodology being used to calculate the Fall Market price for each crop is indicated below. It is intended to reflect the fall Alberta price for the crop being insured.
Grain Corn CHU	Fall Market Price will be the Spring Insurance Price for CHU times the percentage change between the Spring Insurance Price and the Fall Market Price for 2 CW Grain Corn as determined by AFSC
Grain Corn (2 CW)	Fall Market Price will be determined as the simple average of the daily closing price of the December corn futures at the Chicago Board of Trade, converted to Canadian dollars (using the daily average CDN/US exchange rate published by the Bank of Canada) for the month of October, expressed in \$/kg, plus a basis adjustment of \$0.035/kg.
Silage Corn CHU	Fall Market Price will be the Spring Insurance Price for CHU times the percentage of change between the Spring Insurance Price and the Fall Market Price for 1 CW Barley as determined by AFSC.
Barley (1 CW)	Fall Market Price will be determined as the simple average of the weekly average price for Feed Barley in the N ALTA Region during the month of October, expressed as \$/kg, as published on Price and Data Quotes (PDQ) website of Alberta Wheat Commission.

2.06 Premium

- a. **Minimum Premium:** There is a minimum \$25 of total Premium required per insurance Policy.
- b. **Rates:** Premium rates are set annually and reflect AFSC's risk of future losses. For Corn Heat Unit Insurance, premium rates are based upon historical corn heat unit data at the low threshold option. A risk factor is used to set premium rates for the high threshold option.
- c. **Cost Share:** Federal and provincial governments support AgrilInsurance programs by paying all administration expenses and sharing premium costs with the Insured.
- d. **Adjustments & Discounts:**

2%	Continuous Participation Discount	Applies after the first insurance year unless the Insured does not have an active Policy or losses for one year then needs to be zeroed and earned again
2%	Early Payment Discount	Applied to Premium payments received by AFSC the later of June 25 or within 15 days of each versions billing date

2.07 Elections and Renewals

- a. **Application:** New clients must apply for insurance on or before April 30 and AFSC will evaluate eligibility for insurance. Producers are required to demonstrate their legal, financial and operational independence, and can contact AFSC for application documents.
- b. **Renewal Process:** An Insured who elected Corn Heat Unit insurance in the previous year will be automatically renewed based upon the previous year's information. Personalized renewal notices will be available in March. The Insured is responsible to review the information, and if changes are required, complete a Change Request form and return the form to an AFSC representative by mail, fax, email, in person, or request changes by phone, no later than April 30.
- c. **Threshold Option:** The Insured can choose between a high or low threshold options. Payments begin sooner under the high threshold option, so the premium for this option is higher than for the low threshold option.
- d. **Selected Weather Station:** The Insured can choose an insurable weather station near their farm that best represents temperatures on their farm.

Threshold Options			
Selected Weather Station	Long-Term Normal	High Threshold Option*	Low Threshold Option**
Bow Island South	2504	2380	2260
Brooks	2387	2280	2160
Enchant	2387	2280	2160
Fincastle	2504	2380	2260
Iron Springs	2332	220	2100
Lethbridge	2332	2220	2100
Patricia	2231	2120	2000

Raymond	2231	2120	2000
Rolling Hills	2332	2220	2100
Rosemary	2231	2120	2000
Seven Persons	2504	2380	2260
Vauxhaull	2387	2280	2160
Wardlow	2504	2380	2260

- e. **Insurable Crops and Dollar Coverage:** The Insured must select the crops they want to insure and dollar coverage per acre in increments of \$25 from a minimum of \$100 per acre to a maximum dollar value per acre for:
- i. Irrigated corn grain of \$525
 - ii. Irrigated corn silage of \$975
- f. **Declared Acres:** are the total number of acres seeded and those intended to be seeded to annual spring and fall crops, including silage and greenfeed crops, whether the acres are to be insured or uninsured.
- g. **Hail Endorsement:** offers spot-loss coverage and may be elected on a crop by crop basis at 60, 70 or 80 percent Coverage Levels by April 30. Hail Endorsement is not available at 50 percent Coverage Level. Refer to the Hail Endorsement Insuring Agreement for additional information.
- h. **Auto-Elect Straight Hail Insurance:** may be elected on a crop by crop basis by April 30. When elected, a two percent premium discount will be applied on the Statement of Coverage and Premium.

**Straight Hail Insurance can be purchased on a field by field basis until July 31.
Refer to the Straight Hail Contract of Insurance for additional information.**

ARTICLE 3. CONDITIONS

3.01 Threshold Corn Heat Units

The Insured must elect the same Threshold Corn Heat Units for Grain Corn and Silage Corn.

3.02 Restrictions

- a. The Insurable Crop shall be grown on irrigated land and shall be irrigated only by a pivot system.
- b. The Reseeding Benefit and Unharvested Acreage Benefit are not available under this Insuring Agreement.

ARTICLE 4. REPORTING DEADLINES

If a reporting deadline date falls on a weekend, the deadline will be extended to the next Business Day.

Last Date to complete the task	Task	Additional information
April 30	Apply for, make changes to, cancel annual crop insurance	Elected options include: <ul style="list-style-type: none">• Insurable Crops• Selected Weather Station• Threshold Option• Dollar Coverage• Hail Endorsement• Declared Acres• Auto-Elect Straight Hail Insurance
June 1	Amend Declared Acres	With written proof on land purchased, rented, or sold between May 1 and May 31.
June 20	<ul style="list-style-type: none">• File Land Report• Report acres for Unseeded Acreage Benefit	<ul style="list-style-type: none">• See Land Report section for requirements when filing your Land Report• Refer to the Benefits document for information on the Unseeded Acreage Benefit
June 25	File Land Report with late filing fee	Failure to file by this deadline results in breach of contract and the Insured being unable to participate in any AFSC insurance programs for current and following year.
December 31	Pay any current year's outstanding accounts	To avoid negatively affecting your credit and to avoid a cash-up-front on Premium for the following insurance year. Insureds can contact their branch to make payment arrangements.

Other Important Deadlines

Document or Incident	Task	Additional Information
Statement of Coverage and Premium (billing)	Review your billing to ensure it is accurate and complete. Report any errors and omissions within 15 days of the date the version is created by AFSC.	AFSC reserves the right to deny additional liability when information contained on the billing reflects what was reported.

ARTICLE 5. INSURED ACRES

5.01 Insured Acres Details

- a. All eligible acreage and seeded acreage of an Insured Crop, whether owned, rented or crop shared, must be insured. Insured acres are not insurable under any other crop insurance program, except for applicable Endorsements or where AFSC has consented in writing.

Cash rent and crop share landlords are not eligible for insurance as they are not responsible for the agronomic decisions and do not receive the majority of the proceeds from the sale of the crop.

- b. If AFSC determines acres of an Insured Crop and the crop and/or acres differ from those reported by the Insured, the following will apply:
 - i. When completing unseeded inspections AFSC will issue a revised Statement of Coverage and Premium based on the crop type and actual number of seeded acres calculated by AFSC and any Indemnity calculation will also be based on the crop type and actual acres.
- c. AFSC is not required or in any way obligated to revise or adjust its calculation of insured acres for any preceding year.

ARTICLE 6. LAND REPORT

6.01 Land Report Details

- a. A Land Report must be filed once seeding is finished and no later than June 20.
- b. The Insured must report all annual spring and fall crops on land that is owned, rented, or crop-shared and include the following information for each field:
 - i. legal land description for the location of each Insured Crop including the Part;
 - ii. seeding date;
 - iii. crop seeded;
 - iv. number of seeded acres;
 - v. report acres too wet to seed by quarter section, including whether fertilizer had been incorporated or not, and if the land is irrigated or not.

AFSC requires both insured and uninsured land information. Coverage is based on the land base farmed, not just the land insured, therefore the information is required to ensure Coverage and discounts are correct.

- c. Failure to file a Land Report will result in all insurance Policies being cancelled and restrictions on future year's program participation. Where the Insured fails to file a Land Report by the June 20 deadline AFSC may, in its discretion:
 - i. accept the Land Report, if received by June 25, and assess a late filing fee to be paid by the Insured in full before the start of the next crop year;
 - ii. due to extenuating circumstances, AFSC has the discretion to determine the acreage seeded by the Insured and file a Land Report for the Insured which shall be binding on the Insured; or

- iv. cancel this Contract or any part thereof for the current year, in which case the Insured will be unable to participate in any AFSC insurance programs for current and following year with the following exceptions:
 - 1) Livestock Price Insurance can be purchased in the current year; and
 - 2) Straight Hail Insurance can be purchased in the following year.
- d. AFSC reserves the right to reject requests for changes to the Land Report after the June 20 filing deadline.

ARTICLE 7. STATEMENT OF COVERAGE AND PREMIUM

7.01 Statement of Coverage and Premium Details

- a. Information provided by the Insured is used to generate a Statement of Coverage and Premium, which explains Coverage and Premium and states AFSC's Coverage limit.
- b. The Insured should review their Statement of Coverage and Premium carefully to ensure it is complete and accurate. Errors and omissions must be reported to AFSC within 15 calendar days of receipt.
- c. AFSC reserves the right to deny additional Coverage when information contained on the Statement of Coverage and Premium reflects what is reported on the Land Report.

ARTICLE 8. CLAIMS

8.01 Claim Deadlines and Notice of Loss

The Insured is not required to submit a Notice of Loss to initiate a claim for Designated Perils under this Insuring Agreement.

For the following claim, the Insured is required to submit a Notice of Loss to initiate a claim and the deadline to initiate a claim are as follows:

- a. Unseeded Acreage Benefit: contact AFSC on or before June 20.

If the Insured is late in filing a Notice of Loss AFSC may reject the claim.

8.02 Statement of Loss and Inspection

- a. Upon receipt of a claim for loss:
 - i. where AFSC processes a claim, AFSC will serve the Insured with a Statement of Loss.

8.03 Service of Documents

- a. Service of the Statement of Loss may be effected on the Insured by:
 - i. personal service;
 - ii. ordinary mail or registered mail, in which case service is deemed to have been effected;
 - 1) seven days from the date of mailing if the document is mailed in Alberta to an address in Alberta, or
 - 2) 14 days from the date of mailing if the document is mailed to an address located outside of Alberta; or
 - iii. by facsimile, email or other electronic means in accordance with AFSC's most recent records for the Insured.
- b. Where there is more than one Insured in respect of the crop loss for which an inspection has been made, service of the Inspection Report or Statement of Loss on one of the Insured is deemed to be service on all the Insureds.

8.04 Deferrals

To facilitate tax planning, Insureds can choose in advance to defer Indemnities to the following tax year. There will be no recourse to defer payment once a payment has been issued. Deferred Indemnities will not be applied to outstanding Premiums/balances until the deferred date and interest will continue to accrue. As Indemnities are calculated and processed without an inspection, the Insured must notify AFSC to defer an indemnity prior to Indemnities being issued.

ARTICLE 9. INDEMNITY

9.01 Calculation of Indemnity

- a. An Indemnity for each Insurable Crop shall be calculated as follows:
[Dollar Coverage x Payment Rate]
The maximum Indemnity payable shall be 100% of the Dollar Coverage.
- b. The Payment Rate will be based on the Insured's elected Threshold Corn Heat Units and the Insured's Selected Weather Station.
- c. The Payment Rate for the Insured's Selected Weather Station will be zero when the Annual Corn Heat Units is equal to or more than the elected Threshold Corn Heat Units. Where the Annual Corn Heat Units is below the elected Threshold Corn Heat Units, the Payment Rate will be in accordance with the annual table of premium and payment rates for each Insurable Crop.
- d. Adjustment for Late Spring Frost
 - i. If minimum temperature at the Specified Weather Station falls below zero Celsius on or after June 1 but before 700 Corn Heat Units have accumulated, AFSC will make an adjustment for a late spring frost to the Annual Corn Heat Units at that Weather Station and reduce it by an amount equal to:
$$[(\text{number of days after June 1 to the last day that the minimum temperature fell below zero Celsius}) \times (\text{15 Corn Heat Units}) + (\text{50 Corn Heat Units})].$$
- e. Except at the discretion of AFSC, no changes will be made to the Corn Heat Units calculations after an Indemnity has been paid.

CHU Payment Rates for Grain & Silage Corn					
CHU Shortfall	Silage Corn Payment Rate (%) *	Grain Corn Payment Rate (%) *	CHU Shortfall	Silage Corn Payment Rate (%) *	Grain Corn Payment Rate (%) *
0	0	0	< 260	39	57
< 20	3	5	< 280	42	60
< 40	6	10	< 300	45	63
< 60	9	15	< 320	48	66
< 80	12	20	< 340	52	69
< 100	15	25	< 360	56	72
< 120	18	30	< 380	60	75
< 140	21	34	< 400	64	77
< 160	24	38	< 420	68	79
< 180	27	42	< 440	72	81
< 200	30	46	< 460	76	83
< 220	33	50	< 480	80	85
< 240	36	54	=>480	**	**

*The CHUs shortfall in the table are after adjustments for late spring frost (if required)

**Insureds with CHU shortfalls of 480 or more may be eligible for a larger payment if indicated by inspection