

Hell of the North Advanced Rules, Version 3.0

Aim of the Game

To be the first to cross the finish line

Route Types

There are four different types of routes: Flat (green), Hills (orange), Mountains (red) Downhill (black) and Cobblestone. (It is recommended that red cobblestone tiles are treated as hilled cobblestone tiles.)

Asphalt Types

There are three different types of Asphalt: Normal (light grey), Treacherous (dark grey marks) and Cobbled Paving (cobbled)

The Riders

Each team can choose from six types of riders with different characteristics. These are Sprinter, Classics Rider, Time Trialist, Puncheur, All-rounder, and Climber. Each team consists of three cyclists. Players may have more than one cyclist of the same type on their teams. (e.g. Three Climbers or two Puncheurs and one All-rounder.)

Players agree beforehand how many special abilities Riders may have. Riders on the same team may share the same Special Abilities.

Special Abilities

Explosive Climber (EC) – At the cost of one energy, the Rider receives one additional free move each movement beginning on a mountain tile. On mountain tiles, riders with EC may break away from the peloton without the risk of cracking.ⁱ

Explosive Puncheurⁱⁱ (EP) – At the cost of one energy, the Rider receives one additional free move each movement beginning on a hill tile (not including cobblestone hills). On hill tiles, riders with EP may break away from the peloton without the risk of cracking.

Sprinters with EP avoid paying the energy cost when inside the peloton on a hill and reduce the energy cost by one on a mountain.ⁱⁱⁱ

Acceleration (AR) AR (Acceleration) 1, 2, 3 - Once per race (or once per time trial) the Rider receives free movement spaces equal to his AR#. AR1 = 1 space, AR2 = 2 Spaces. AR3 = 3 spaces. These free movements may be used at any time, either together or separately. AR may only be used on terrain on which a rider has at least three free-movement, or has EC, EP, or TT. AR may not be used on a downhill tile unless the rider is marked AR-D..^{iv}

Time Trial Specialist (TT)- Regardless the type of terrain, the Rider receives one free movement every turn during a time trial. In road races, at the cost of one energy the rider receives one additional free movement on flat terrain. This ability is lost when slipstreaming behind other riders and is NOT lost in sprint zones. Time Trialists cannot also be TT Specialists.^v

Sprinter (SP) – The Rider receives one extra free square during every movement that begins in a flat sprint zone. Sprinters may have sprinting abilities, making them even faster sprinters.

Cobblestone Specialists (CS) – The rider receive an extra movement point whenever they begin a turn on any cobble section (both hilly and flat). On cobble hill tiles, riders with CS may break away from the peloton without the risk of cracking.^{vi}

Fighter (F) - The Rider only runs the risk of falling only on the second square passed during the paying portion of his movement. Fighters maintain their Special Ability in the rain. (including cobblestone sections.)^{vii}

HS(Hill Sprinter)-The Rider receives one extra free movement during every movement that begins in an uphill sprint zone (not on cobblestones). Additionally, the rider receives one extra free movement on the green tile immediately prior to the sprint zone. This sets him up for his hill finish.^{viii}

Mountain Sprinter (MS) – The Rider receives one extra free movement during every movement that begins on a mountain or hill sprint zone. ^{ix}

Sprint Lead Out (LO) – The sprinter has an exceptional lead out team and receives a bonus free space while in the slipstream of a teammate in a sprint zone.^x

Stage Hunter (SH) – Once in a stage race or twice in non-consecutive stages in a Grand Tour, the rider receives four additional free movements. The rider may not use more than two free movements in one turn. The other two free movements maybe be used at any time. Additionally, the rider can go below zero energy, and may end the race with -5 energy while maintaining his full free movement (movement is not reduced to one free movement). Next stage the rider would reduce starting energy by his final negative energy total from the previous stage. SH may only be used on terrain on which a rider has at least three free-movement, or has EC, EP, or TT. SH may not be used on a downhill tile unless the rider is marked SH-D. In all other races, SH equals AR2.

Events

Slipstreaming - A rider who finishes their move exactly behind another cyclist after their movement will get 1 free movement during

their next turn. Slipstreaming is lost if the cyclist ahead is motionless or if the cyclist ahead makes a move of at **least 6 spaces (cobblestone, hill or mountain), 7 spaces on flat terrain,^{xi} 8 spaces on downhill, mountain, sprints, hill sprints, and intermediate sprints; 10 spaces in final sprints and Team Time Trials^{xii}**. In flat sprint zones, sprinters and riders with sprinting ability do not lose slipstreaming.^{xiii}

Risks – Each cyclist may take 4 risks during a race. There are two types of risks: Crack & Fall. Each time a cyclist takes a risk their chances diminish. Before a risk is attempted a player must be able to pay for the consequences of a failure. Roll a 12-sided die. The 1st risk roll in clear weather must be >3, second a >5, etc. . In the rain, chances of cracking increase. In rain, 1st risk roll must be >4, second roll must be >6, etc **3/4 5/6 7/8 9/10^{xiv}**

Crack – If a cyclist pays for more movement on a mountain tile than is allowed by the mountain classification they risk cracking. If the risk roll (above) is failed the rider must pay double the movement cost on a hill tile and triple the cost on a mountain tile.^{xv} If a Rider has three free movements when breaking away from the peloton on a mountain or a hill space, he does not risk cracking during that turn.^{xvi}

Fall – If a cyclist pays for a move in which they pass through or finish their movement on treacherous asphalt they risk a fall. If the risk roll (above) is failed the rider must pay for the total movement and miss a turn on the spot in which they fell. Fighters will only risk a fall on the second treacherous asphalt they pass through during the paying portion of their movement. Riders may only risk falling once per turn. In other words, riders cannot pass through two sections of treacherous asphalt during their paying portion of their move. They must stop before it.

Puncture – When the peloton die is rolled and falls on the red face, all cyclists risk a puncture. First move the peloton as normal and pay energy costs. All cyclists roll in classification order and if a red 4 is rolled again that cyclist suffers a puncture. It must stop where it is and next turn will be moved last (even after other riders dropped by the peloton). If the cyclists are in the peloton place them a space behind the peloton. During the next movement phase immediately following a puncture, the rider is not allowed to pay for his movement: he is limited to his free movement ability. In following turns, the rider may move without restrictions.^{xvii}

Cobblestone – A cyclist must roll for risk for a movement on treacherous asphalt during the paying movement of his turn. The risk roll is as follows:

Die Result	Effect
4 (blue or orange)	Fall
4 (red)	Puncture

This is not counted as one of your 4 risks.

Game Setup

- i. Set up the tiles to make a route, placing the start line and finish line tokens at the corresponding ends of the route
- ii. Place one Mountain Climb Category token at the start of each mountain and hill tile.
- iii. Place one or more feed zone tokens on the circuit.
- iv. Shuffle and place the feed zone tiles facedown in their corresponding colour piles in easy reach of all players.
- v. All players decide how many cyclists they will control – 1, 2 or 3 and take an energy table.
- vi. Players then fill in their riders name and number of peloton pursuits. (Peloton pursuits equal the total number of green tiles plus half the number of black tiles rounded up, with a minimum of six pursuits. If there is not exactly four teams racing, multiply the TTP's by four and then divide that total by the number of teams that are racing. So, if there are 9 TTP's in a race and three teams racing, each team would receive 12 TPP's ($9 * 4/ 3 = 12$).^{xviii}
- vii. Teams receive two additional pursuits if the team is strong in the courses predominant terrain. A team receives 2 additional pursuits if it has is a rider that is a "race favourite" and two more for wearing the yellow jersey in a stage race.)^{xix}
- viii. Players then work out the riders starting energy and fill it in (For one-day races, the starting energy equals 60% of the total mileposts. For stage races, the starting energy equals 50% of the total mileposts).^{xx}
- ix. Contrary to HOTN standard rules, riders do no draw an energy bidon at the beginning of the race.
- x. In Stage Races, Riders can carry up to 10 energy points of unused energy from the previous stage.^{xxi}
- xi. Riders who are the race favourites, receives an additional 5 energy at the start of the race.

- xii. Place the peloton token at the start line and the peloton tile in easy reach of everyone.
- xiii. Each Players place their support rider token from position 1 – 4 (This can be decided randomly. In stage races, it will be in the order of the best rider from each team's CG standings).
- xiv. In peloton token order players place their cyclists, one at a time, on the peloton tile (front or back) and will continue until all riders are placed.

Game Turns

- i. **Movement of the cyclists that have broken away from the Peloton**
 - The cyclist who is in the lead will be moved first, followed by the rider in 2nd, 3rd, 4th etc.
 - Cyclists cannot stay still. They must move at least one square each turn.
 - All cyclists get free movement (see movement chart)
 - In addition to this free movement a cyclist also gets any movement granted by their selected quality and gets an additional 1 movement if they are slipstreaming.
 - After free movement a rider may choose to pay for additional moves by subtracting the corresponding number from their energy table. Energy costs for paying moves are as follows:

Paying Movements (spaces)	1	2	3	4	5	6
Energy Spent	1	3	5	8	11	15

- If a cyclist has to pass through a space occupied by another rider they must take the longest path and pay an additional energy point for each occupied square they pass through.
- If two or more cyclists are tied, the cyclists who arrived last will act first next turn, followed by the second last to arrive, etc.
- A player may opt to use less that their total free moves. In this case the amount of points unused is added to that cyclist's energy table.
- **Turn relay:** The front rider of a group of riders can do a turn relay: The rider will first move sideways, secondly wait until the rest of his group has made their move, and

- then thirdly he will make his normal move. If a rider behind refuses to relay, then that rider moves after all riders in the group have moved.^{xxii}
- If more than one rider refuses the Turn Relay, the last rider to refuse will be the last rider to move, keeping the "refused" riders in the same relative order.
 - A group of riders is defined as 2 or more riders situated on spaces which are connected to each other, either diagonally or orthogonally. The group continues until the first empty space.^{xxiii}
 - **Race Etiquette:** If a rider has used most of his energy and can no longer pull his teammate in his draft and will not participate in the finale, and has no reasonable GC hopes, this rider must yield to all cyclists passing him by taking the longest route through a corner. He may not impede other riders' progress in any way.^{xxiv}

ii. Breaking Away

- In Support Token order, starting with the player who is in 1stplace, then 2nd, 3rd and then 4th each player may jump with two riders.^{xxv}
- After all the teams have had an opportunity to jump, the 1st place team receives one additional opportunity to jump in response to any other teams attacks. The 1st place team my only respond if they have not already jumped with their own riders this turn. ^{xxvi}
- Each team is only allowed to jump with a maximum of two riders each turn.^{xxvii}
- Jumping costs a rider one energy.^{xxviii}
- Only cyclists in the front of the peloton can break away and must move at least 4 squares.

iii. Movement of Riders in the Peloton

- In support token order each player may move one or more of their cyclists within the peloton.
- Cyclists at the back may be willingly dropped from the peloton, stay at the back or move to the front. Cyclists at the front may stay at the front or move to the back.
- Cyclists willingly dropped from the peloton may provide a slipstream on the very next movement phase for Riders on their team that were involuntarily dropped from the peloton. Cyclists who provide a slipstream are placed in

the same square as their teammate. (This is an exception to the rule of only one rider in a square at a time.)^{xxix}

iv. Peloton Movement

- In support token order each player is asked if they want to use a pursuit to increase the speed of the peloton. If the first player declines it goes to the second player. It is possible for no players to use a pursuit.
- If all teams decline to pursue, the support token order remains unchanged.
- If a player decides they want to use a pursuit to increase the speed of the peloton this is deducted from their starting total. The player moves their support rider token to position 1, shuffling everyone else down.
- Peloton leader may spend up to 2 TPP's to increase peloton's pursuit to a maximum of 7 spaces on flat or 6 on downhill terrain after first turn of control.
- When the peloton begins its turn on a Cobblestone, Hill or Mountain tile, the peloton leader can increase the peloton's pursuit up to 2 TPP's if his team specializes in that type of terrain. Otherwise, the team may only increase the peloton speed by 1 TPP.
- On flat terrain, a second team can add 1 TPP to the peloton pursuit. In support token order, starting with the second team, each team is given the opportunity to contribute to the pursuit. The team which contributes its TPP moves it's token up to the second and shuffles everyone else down.
- If the peloton starts its turn on Cat.1 or a HC mountain tile, subtract one space from the peloton's total movement. The maximum peloton pursuit movement on Cat.1 and HC mountain tiles is 5.
- The player who is in position 1 with their support rider token rolls the dice and moves the peloton that many spaces (+ the number of TPP's used and +1 space if no cyclists remain in the peloton) to a maximum of 6 spaces.
- The peloton takes up 2 squares (lengthways) and where available is moved via the arrow spaces.
- Riders in the Peloton must pay the following energy costs:

Position in Peloton			Total Peloton Movement	
	3 or 4	5 or more	Hills	Mountains
Back	0 energy	1 energy	Sprinters pay +1	Rouleurs & pay +1 Sprinters pay +2
Front	1 energy	2 energy		

Optional Rules for more Realism

v. Challenging Peloton Leadership

- Peloton disruption is resolved before teams declare peloton pursuit. Only one team may *successfully* challenge for Peloton Leadership. If a team unsuccessfully challenges for leadership, they may not attempt again until the next time the peloton moves.
- Starting with the second place team, then the third place team, etc., one team may pay 2 TPP to attempt to control the peloton. On a roll of 5 or less on a twelve-sided, the present peloton leader maintains control of the peloton. On a roll of 6 or greater, the challenge is successful.^{xxx}
- After a successful challenge, the former peloton leader moves down to second place in the peloton and everyone else is shuffled down. On an unsuccessful challenge, no teams are moved.
- Before the peloton die is rolled, it is also possible for one team to challenge for second place within the peloton by spending 2 TPP's. Starting with the third place team and moving up to the third place team, until one team has challenged the second place team in the peloton. On a roll of 5 or lower on a twelve-sided, the second place team maintains their position in the peloton. On a roll of 6 or less, the challenge is successful ^{xxxi}
- After a successful challenge, the former 2nd place team moves down to 3rd place in the peloton, and third moves down to fourth.

Die Modifiers for Peloton Challenge

	Peloton Leader	Challenger
Peloton speed is =>6 or =>5 on mountains/cobbles	+1	
For each rider still in the peloton	-1	+1
Has a race favourite in the peloton	+2	-2
Currently in Terrain speciality of the team, or within 6 spaces of entering terrain speciality	+2	-2
Peloton Leader uses 1 TPP to defend lead	+1	

{For example: A team chooses to, challenge a team that has a race favourite (+2) three spaces prior to entering cobblestones, a terrain that both teams specialize in (these advantages cancel each other out). The peloton leader had rolled a 5 on the previous turn and had used TPP for pursuit resulting in the peloton moving 6 spaces

(+1). The peloton leader chooses to fight for position, using 1 TPP (+1). The challenging team would have to roll a 6+2+1+1= 10. For the challenge to be success, the challenger would have to roll a 10 or more.

(Clarification: After the peloton leadership has been challenged, then the peloton pursuit is resolved. If the new peloton leader elects not to pursue, then the first team to declare peloton pursuit becomes the new peloton leader, and the former peloton leader slides into second position.)

vi. Peloton in Cobbled Sections

- If the peloton begins its movement in a cobblestone tile and an orange 4 is rolled with the peloton dice, each rider in the peloton must roll for Cobblestone Risk.
- A red 4 on the peloton die results in a puncture. The rider being placed immediately behind the peloton.
- An orange 4 on the peloton die results in the rider “being caught in traffic. Treat this as a puncture, but when “caught in traffic” place the rider two spaces behind the peloton.
- Teams that have a rider that has “Caught in Traffic” or puncture may voluntarily drop a rider from the peloton and place him in the same square. This voluntarily dropped rider will provide a slipstream to his teammate.

Cobblestone Incident Risk	Effect
4 (orange)	Caught in traffic
4 (red)	Puncture

(Optional Rules, Cobblestone Rain Risk)

- In the rain, use the Cobblestone Rain Incidents Risk Chart. If the peloton begins its movement in a cobblestone tile while it is raining and rolls an orange 4 with the peloton die, every rider in the peloton must roll for Cobblestone Rain Risk.

Cobblestone Rain Incidents Orange 4 Peloton Risk Rolls	
Cobblestone Rain Incident	Effect
4 (blue)	Fall
4 (orange)	Caught in Traffic
4 (red)	Puncture

vii. Movement of Cyclists dropped by the Peloton

Cyclists can be dropped if they puncture a tire, cannot pay the energy costs. These cyclists will be placed the space

behind the peloton after it has moved. These cyclists pay normal energy costs.

viii. Weather (Optional)

- At the start of a race, roll a ten-sided die to determine the weather.

Weather Roll	1 - 7	8	9	10
Weather	Sunny	-1	Rain	Rain & -1

- During the race, every “blue number” rolled for the peloton is a chance for the weather to change. The weather die must be rolled again and the new weather takes effect two tiles ahead of the 1st place cyclist. ^{xxxii}

ix. Stage Race Time Delays

Type of Stage Race	For each turn behind the winning rider
Flat Stage	1 Second
Cobbles	10 Seconds
Hilly Stage	20 Seconds
Time Trial	30 Seconds
Mountain Stage	40 Seconds

Slip Stream Chart

Slip streams are lost when the rider in front goes
This speed or more

Flat	Cobbles	Hills	Downhill	Mountains	Sprint Zone	TTT
>7	>6	>6	>8	>6	>10	>10

Viii Time Trial Rules^{xxxiii}

1. The starting energy for each rider is double the sum of total milestones
2. Each tile has a "risk crack" number. If a rider chooses to exceed the paid movement of the "risk crack" number, he must roll the peloton die. Failing a "risk crack" doubles the energy costs expended for that turn. (Many of the ideas in this section were adapted from Gubban's Time Trials for the Peloton Expansion).
 - a. When designing a time trial stage, each flat terrain should have a risk crack of 4.
 - b. No risk of crack when descending or in the sprint zones.
 - c. I recommend that hills have a risk crack of 3; and mountains have a risk crack of 2.
3. For every turn a rider's paying movement is the same as the turn before, the rider will gain one free movement in the following turn (regardless of if the rider cracks but not if he falls or punctures).
4. If a rider falls, add 30 seconds to his time.
5. Roll the peloton die at the end of each turn to determine if a rider risks a puncture. If a cyclist risks a puncture roll again to determine whether or not he punctures.
6. If a rider punctures, add 15 seconds to his time.
7. Each turn in a time trail equals 30 seconds. (For races under 30 km).
8. When a rider crosses the finish line, add three second for each space moved in order to cross the finish line. (For example, if a rider moved three spaces in order to cross the finish line, add nine seconds to his time.)
9. The rider who has spent the shortest amount of time on the stage is the winner of the time trial and will be given the time 0 seconds. All other riders will have to deduct the winning riders time from their own time.
 - a. Ties go to the riders with the most energy points remaining. If there is still a tie, then to the overall GC standing in the race. If the time trial is the first event of a stage race, then the rider who successfully rolled the most "risk cracks" in this stage is the winner. If it is still a tie, roll a die, highest number

rolled is the winner.

- b. In the case of ties, add .1" to a rider's time for each place they are moved down with the tie breaker. In a three way tie, the rider awarded first would receive a time of 0.0", the next rider would receive a time of 0.1" and the next rider would receive 0.2."
10. If you are using Leader 2 rules, do not subtract one additional energy point per turn. Use the standard energy table.
 11. Use all rider's special abilities for Time Trials.

Team Time Trial:

In a team time trial of 3 riders per team, the time used by the second rider to pass the finishing line, shall be the time given to the first two riders. The third rider will get his own individual time for the stage.

Suggestions for rider design

As originally designed in Leader 1, Climbers will perform terrible in flat time trials and All-rounders, will perform fair. In reality, Climbers and All-Arounders are GC riders, who in general, do well in time trials. To fix this issue:

1. All Climbers and every All-rounders have the Time Trial Specialist ability built in to their movement abilities. This means that in a time trial, every All-rounders and Climber receives one additional free movement each turn. (Eg. all climbers would have two free movements in the flats, three free movements in the hills and four in the mountains)
2. If an All-rounders or a Climber is an exceptional Time Trialist, they may an additional Time Trial Specialist ability added to their movement. This would mean that a climber deemed a Time Trial Specialist would have three free moves in the flats and three free movements in the hills and four in the mountains.)

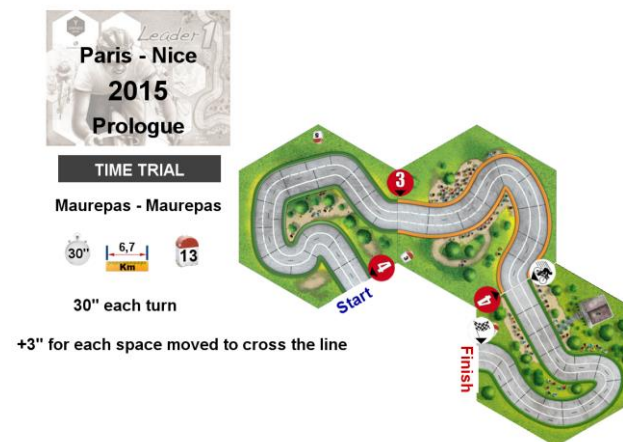
Suggestions for Course Design

1. When designing a Time Trial that is less than 30 km, use a two-to-one ratio: two mile posts for each kilometer. A 10 km time trial should be 20 km long. (Otherwise you will need to adjust the time per turn from 30 seconds and the time per move from 3

seconds for a paid move.) For red tiles, use a one-to-one ratio.

2. The last green tile is a sprint area.

An Example of a Time Trial Course:



Cyclist Free-Movement Chart ^{xxxiv}

	Flat	Hill	Mountain	Down Hill	Sprint	Flat Cobblestones	Hill Cobblestones	Time trials
Climber	1	2	3	4	1	2	2	2 on flat
All Rounder	2	2	2	4	2	2	2	3 on flat
Puncheur	2	3	1	4	3	2	3	
Time Trialist	3 [*]	2	1	4	3 [*]	2	2	4 on flat
Classics Rider/ Rouleur	3	2	1 [*]	4	3	3 ^{xxxv}	3	
Sprinter	3	1 [^]	1 ^{**}	5	4	2	2	2 on flat ^{xxxvi}
*Riders in the peloton use one energy (**= two energy) for each movement that begins on a mountain tile. If a sprinter has EP, the cost for riding in the mountains is reduced by one energy.								
[^] Riders in the peloton use one energy for each movement that begins on a hill tile. If the Rider has EP, Ignores all energy costs on a hill.								
[*] Time Trialists may move one additional Free Movement spaces on the flat (4 spaces) at the cost of one energy. ^{xxxvii}								
On hill tiles, puncheurs and riders with EP may break away from the peloton without the risk of cracking. On mountain tiles, climbers and riders with EC may break away from the peloton without risk of cracking. On cobbled hills, classics riders and riders with CS may break away from the peloton without risk of cracking.								
On turns beginning on mountain spaces, sprinters and classics riders without EC MUST ride in the rear of the peloton.								

Riders Special Abilities
EC (Explosive Climber) – At the cost of one energy, the Rider may receive one additional free move for every movement beginning on a mountain tile. When the peloton is on a mountain tile, riders with EC may jump without a risking crack.
EP (Explosive Puncheur) - At the cost of one energy, the Rider receives one additional free move for every movement beginning on a hill tile (not including cobblestone hills). Sprinters avoid paying energy cost of riding in the peloton on hills and reduces the cost of the mountains by one energy. When the peloton is on a hill tile, riders with EP may jump without a risking crack.
AR (Acceleration) 1, 2, 3 - Once per race (or once per time trial) the Rider receives free movement spaces equal to his AR#. AR1 = 1 space, AR2 = 2 Spaces. AR3 = 3 spaces. These free movements may be used at any time, either together or separately. SH may only be used on terrain on which a rider has at least three free-movement, or has EC, EP, or TT. AR may not be used on a downhill tile unless the rider is marked AR-D.
TT (Time Trialist) - The Rider receives one free movement <u>every turn</u> during a time trial. In races, at the cost of one energy the rider receives one additional free movement on flat terrain. For Time Trialists, TT functions like EC in a road race.
F (Fighter) - The Rider only runs the risk of fall only from the second square passed during the paying portion of his movement. Rain has no effect on Fighters.
CS (Cobbles Specialist) - The rider receive an extra movement point whenever they begin a turn on any cobbled section (both hilly and flat). When the peloton is on a cobblestone hill tile, riders with CS may jump without a risking crack.
SP (Sprinter) - The Rider receives one extra free square during every movement that begins in a sprint zone. Sprinters may have sprinting abilities, making them even faster sprinters
HS (Hill Sprinter) - The Rider receives one extra free movement during every movement that begins in an uphill sprint zone (not on cobblestones). Additionally, the rider receives one extra free movement on the green tile immediately prior to the sprint zone. This sets him up for his hill finish.
MS (Mountain Sprinter) - The Rider receives one extra free movement during every movement that begins on a mountain or hill sprint zone.

Race Favorite - The Rider receives 5 energy at the beginning of a race in which he is a favorite.^{xxxviii}
Stage Hunter (SH) – SH (Stage Hunter) – In most races functions the same as AR2. Once in a stage race or up two non-consecutive stages in a Grand Tour, the rider receives four additional free movements. The rider may not use more than two free movements in one turn. The other two free movements maybe be used at any time. Additionally, the rider can go below zero energy, and may end the race with -5 energy while maintaining his full free movement (movement is not reduced to one free movement). Next stage the rider would reduce starting energy by his final negative energy total from the previous stage. SH may only be used on terrain on which a rider has at least three free-movement, or has EC, EP, or TT. SH may not be used on a downhill tile unless the rider is marked SH-D.

Paying Movements (spaces)	1	2	3	4	5	6
Energy Spent	1	3	5	8	11	15

Cobblestone Rain Incidents Orange 4 Peloton Risk Rolls	
Cobblestone Rain Incident	Effect
4 (blue)	Fall
4 (orange)	Caught in Traffic
4 (red)	Puncture

Cobblestone Incident Risk	Effect
4 (orange)	Caught in traffic
4 (red)	Puncture

Position in Peloton			Total Peloton Movement ^{xxxix}	
	3 or 4	5 or more	Hills	Mountains
Back	0 energy	1 energy	Sprinters pay +1	Classics Riders pay +1 Sprinters pay +2
Front	1 energy	2 energy		

Lose Slipstream	
> 5	Cobblestones,
> 6	Flat, Hills & Mountains
> 8	Downhill, and intermediate, hill an mountain sprints
>10	Team Time Trials & Final Sprints
Unlimited	Flat Sprint Zones for Sprinters

Turn relay: The front rider of a group of riders can do a turn relay: The rider will first move sideways, secondly wait until the rest of his group has made their move, and then thirdly he will make his normal move. If the rider behind refuses to relay, then that rider moves after all riders in the group have moved.

Speed of the peloton	Maximum speed	Max with 2 teams *	Pursuit per team **	Ability for +2	Adjustment to dice
Flat	6	7	+2	-	-
Downhill	6	-	+2	-	-
Hill	6	-	+1	Gray	-
Mountain	5	-	+1	Red	-1
Cobbles	6	-	+2	Green	-1

* only on the flat the peloton can pursuit with two teams

** On the second and following consecutive peloton pursuits, a team may use 2 TPP's.^{xl}

Time Delays for Stage Races

Type of Stage Race	For each turn behind the winning rider
Flat Stage	1 Second
Cobbles	10 Seconds
Hilly Stage	20 Seconds
Time Trial	30 Seconds
Mountain Stage	40 Seconds

Risk Rolls

1 st Roll	2 nd Roll	3 rd Roll	4 th Roll
3 / 4	5 / 6	7 / 8	9 / 10

	Peloton Leader	Challenger
Peloton speed is =>6 or =>5 on mountains/cobbles	+1	
For each rider remaining in the peloton.	-1	+1
Has a race favourite in the peloton	+2	-2
Currently in Terrain speciality of the team, or within 6 spaces of entering terrain speciality	+2	-2
Peloton Leader uses 1 TPP to defend lead	+1	

Free Movement Notes:

1. Downhill Specialist is a game breaker. That special ability is much too powerful; therefore it is not included in these rules. It is noteworthy that in Gubban's Peloton Expansion, he has actually reduced the descending ability of all riders, while giving no riders a descending advantage.
2. The normal Time Trial Specialty is an irrelevant in most Hell of the North races. Yet in road races, time trialists exhibit great endurance. To account for this in the game, Time Trial Cyclists and riders with the special ability of time trialing are given one free space on flat terrain at the cost of one energy. Using this rule, time trialing ability is relevant for all races.
3. All Classic Riders have been given the ability to move +1 on cobblestone flat and hill tiles. To enhance a rider's cobblestone ability further, merely add the Fighter special ability. Classic Riders can also have Cobblestone Specialist ability. Again, unlike the cobblestone specialty, the fighter ability is an ability that translates to any race with treacherous asphalt.
4. Each type of rider has its own specialty:
 - a. Climbers & All-rounders receive the stage race benefit of one free space on flat terrain during time trials. Unlike Time Trial specialist, however, they do not receive +1 movement on flat terrain in other races. This benefit is reserved for time trialist and time trial specialists.
 - b. Puncheurs have sprinting ability making them equal to Classics Riders in sprint zones. Puncheurs typically have a good finish.
 - c. Time Trialists receive one free space on flat terrain at the cost of one energy.
 - d. Classic Riders are cobblestone specialists.
 - e. Sprinters, in addition to sprinting ability, sprinters are descending specialists. Giving sprinters a descending advantage gives them 10 total free movements (3-1-1-5), which is the same as the other cyclists. Although descending is a powerful ability, because of the sprinters' lack of climbing ability, descending merely equalizes their chances. In fact, in extremely hilly terrain, sprinters will still perform very poorly.
5. When the peloton is on a cobblestone tile, check for orange die rolls.

Credits and Additional Notes:

Many of the ideas for this variant of Hell of the North came from Garf's Leader 2 and Gubban's Peloton Expansion 3 & 4. The ability for the peloton to pursue the escapees more TPP per turn comes from Board Game Geek user WonderCinz's Leader 2 Player's Aid, refined by Christophe De Kezer with the pursuit matrix. Reducing the starting energy, adding an energy cost to breaking away from the peloton, and how to calculate the number of TPP's are ideas that adapted from Garf's Leader 2. Several of the cyclist special abilities also come from Garf. Explosive Puncheur, Hill Sprinters, Sprint Lead out, and Time Trialist's racing abilities were my own special ability innovations. Cobblestone Incident in the Peloton was one of my ideas. The Hill Sprint idea came from a conversation I had with BGG member Christophe De Keyzer. That conversation led to adding the Mountain Sprint.

The weather rules, limiting teams to two riders breaking away per turn, turn relay and time trialing rules were adapted from Gubban's Peloton Expansion 3. Increasing slipstreaming ability in the sprint zone was one of my innovations. Christophe De Keyzer improved on this idea by having unlimited slip streaming in sprint zones for sprinters. Christophe also came up with the idea of restricting a riders performance after a puncture and cobble rain incidents. The graphic layout for the special abilities was designed by Christophe De Keyzer.

Embedding each type of cyclists with their own set of special abilities and cobblestone incidents in the peloton was another of my innovations. The standard cyclist set up seemed insufficient. Using standard rules, Climbers and All-rounders will perform poorly in Time Trials. Even with giving them time trialing ability, they tremendously underperformed against Rouleurs on flat courses. Embedding Climbers and All rounders with +1 in Time Trials on the flats gave much more realistic results. Puncheurs are relatively fast at the line. I gave them a sprint speed of "3." Classic Riders are good on cobbles, so all Classic Riders are embedding with a cobble specialist ability. Sprinters often get lost in the hills, but they can make it up on the descents, so I gave sprinters an additional descending ability. Some Rouleur-type riders are good on cobbles: some are better at Time Trialing. So, Rouleurs were separated into two different classes of riders: Classic Riders and Time Trialists.

End Notes

ⁱ Requiring a payment for increasing climbing insures that an All-rounder will not be able to climb quite as well as a Climber. Also, a Puncheur will have an advantage in the hills over a Classics Rider with Explosive Puncheur ability.

ⁱⁱ Five years ago, Daniel Kazaniecki (Garf on BGG) created the Explosive Climber in his Leader 2 rules. That was a great innovation. I felt it was important to distinguish between good mountain climbers and good puncheurs. Just because a rider is a good climber, does not mean he is good in the hills. Michal Kwiatkowski is great in the hills. That does not mean he can keep up with Froome in the mountains. There are two different types of climbers, so there should be two different types of climbing abilities.

ⁱⁱⁱ Christophe's recommendation. Originally, I had said if a rider has three free movements in a given terrain, they can break away from the peloton without risk of cracking. This rule is easier to administer.

^{iv} This idea is from Christophe de Kezer and I believe to be an improvement over the Leader 2 Aggressive Rider special ability which limited the use of AR to breaking away from the peloton.

^v Time Trialist as a special ability with relevance for road races is my own innovation. Time Trialist tend to be very strong in a break away and they often are lead out men for the sprint trains. Christophe de Kezer improved on the idea by allowing TT to maintain their ability even in a sprint zone.

^{vi} Cobblestone Expert was one of many innovations by Kazaniecki (Garf on BGG) in his Leader 2 rules that were eventually adopted by the official rules of Hell of the North.

^{vii} I intentionally omitted Expert Descender. That special ability is much too powerful.

^{viii} Hill Sprint is an ability that I had toyed with in the past. Then, I basically panned it until Christophe de Kezer suggested we tried it. At first, we attempted blending Hill Sprinting with sprinting: Hill Sprinters were also sprinters on the flats. We nixed that before play testing. Greg Van Avermaet may be good climbing a final hill, but that does not mean he can keep up with Peter Sagan on a flat sprint.

^{ix} Mountain sprinting naturally evolved from the idea of hill sprinting. MS receive bonuses on both hills and mountains. This is to simplify the rules. One rider does not need both HS and MS. The reason we decided to simplify the rules here, but not at Explosive Climber is that when you actually look at the riders, the riders who would receive MS, would also qualify for HS – without exception.

^x This is my own innovation. There are very few sprinters who truly stand out: Cavendish, Greipel and Viviani for example. With only AR and SP as special abilities, it is difficult to make truly exceptional riders stand out. That is why I came up with LO ability. It can also be used to make some sprinters a little weaker. If a rider is not particularly good at surfing other wheels of other teams, then instead of giving that sprinter AR, I would give him LO. He must use his teams lead out train to reach maximum sprint speed. LO special ability for sprinters makes it necessary to have unlimited drafting in sprint zones, otherwise LO is almost worthless.

^{xi} Gubban has increased slipstream speeds to 7 on all terrain. Christophe de Keizer suggested increasing to 7 on flat terrain. I have chosen not to adopt Christophe's suggestion, because it would further weaken the peloton's ability to chase escaped riders..

^{xii} Slip stream of 9 in Team Time Trials comes from Gubban's Peloton Expansion v. 4.

^{xiii} In final sprints, riders slip stream at extremely high speeds. Christophe de Keizer came up with the idea of having unlimited drafting for sprinters in the sprint zones. If a sprinter grabs your wheel in a sprint zone, he won't let go. This will come in very handy with the Sprint Lead Out (LO) ability.

^{xiv} Again, credit goes Tonni Jensen's Peloton Expansion (Gubban on BGG) for the risk roll rules.

^{xv} In Leader 1 rules, riders paid triple energy for cracking on a climb. This made it too difficult to risk cracking in the hills. In Hell of the North, the penalty for cracking in a climb was reduced to paying double the energy. This rule change made it too easy to make a climbing risk on extremely difficult climbs (e.g. paying for three moves on an HC mountain). As he often does, Tonni Jensen (Gubban on BGG) came up with the perfect solution: different penalties for the different climbs. Pay double on hills & pay triple on mountains for failing a climbing risk.

^{xvi} This is the basic rule for Climbers in Hell of the North for Climbers in the mountains. We have merely expanded it to include any rider that has "3" free movements on a hill or a mountain when breaking away.

^{xvii} This is another brilliant innovation by Christophe de Keizer. I had often thought that the puncture rules were a bit of a nuisance. Sometimes a rider would lose one or two energy. At worst, it could actually be an advantage forcing a player behind you to move first. Now, the rider will have to work hard to catch up.

^{xviii} When there are fewer teams racing, it can become very hard for one team to control the peloton. If two teams attack, the team remaining in the peloton will soon run out of pursuits.

^{xix} The basic rules establish the number of peloton pursuits at 6, regardless the length of the race or the type of terrain. If a race is a long flat one day race, in real life, the peloton would have no trouble controlling that. With the original rules, teams would run out of pursuits in a hurry and the break could stand. These rules make it easier to control breaks on flat stages or if your team is strong on a particular type of terrain.

^{xx} In his Leader 2 rules, Daniel Kazaniecki (Garf on BGG) was the first to point out that the peloton was too weak with the standard Leader 1 rules. In his first simplified rules, he reduced the energy of riders to 60 – 70% for one day races. In Leader 2, he decided to reduce the starting energy of riders to 70% and then subtract 1 energy each turn a rider was in front of the peloton. For about 18 months, I used this model. . In both Aaron Cinzori's (WonderCinz on BGG) and Rick Weckermann (NastyCleavage on BGG) versions of a player aid for Leader 2, they omitted subtracting 1 energy each turn a rider was out in front of the peloton. Despite their omission, I continued to use Daniel Kazaniecki's energy rule, until Christophe de Keizer convinced me that this rule discouraged riders from breaking away. This is something that presumably Aaron and Rick saw, but did not dawn on me until my conversation with Christophe.

^{xxi} In the standard Hell of the North rules, 15 energy can be carried from one stage to the next. In standard Hell of the North rules use 100% milepost to establish starting energy. Since I am reducing energy by between 60 – 70%, it makes sense to reduce the amount of energy that can be carried from stage to stage by 66% or 10 energy.

^{xxii} This is another brilliant innovation by Tonni Jensen (Gubban on BGG). The only thing that is not clear with his rule is, What happens when one rider fails to cooperate? My suggestion is that the rider in front must complete his move first, then the uncooperative rider moves. If there are riders behind the uncooperative rider who would have participated in the turn relay, they are precluded from doing so. The blocking rider moves next. His blocking forces other riders to pass him after his move.

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^{xxiv} It is very difficult to catch riders who are in the lead. Allowing spent riders to take key squares creates an unrealistic impediment giving breakaway riders an unfair advantage. In real cycling, a spent rider attempting to cut in front of passing riders would cause an accident and is terrible form. After pulling for their rider for most of the race, they can't block teams from trying to catch the leader.

^{xxv} This order of jumping is different than the standard Hell of the North rules. It rewards being in control of the peloton. If you control the peloton, your riders get the first shot at the best line. In game play, this turns out to be a significant advantage.

^{xxvi} This order of jumping is different than the standard Hell of the North rules. This rule rewards a player for being in control of the peloton. If you control the peloton, your riders get the first shot at the best line. In game play, this can turn out to be a significant advantage.

^{xxvii} A team can still have three riders that have escaped, but just two per turn. With three riders escaping at one turn, the road clogs up quickly. The third and fourth team to jump are at a distinct disadvantage. Previously, I had been using Daniel Kazaniecki (Garf on BGG) Leader 2 rules; each team jumping one rider at a time. No team could jump its second rider until each team had had a change to jump one. This rule prevented the road from clogging, but makes it much more difficult for riders to work together with their teammates. The solution for this problem is another brilliant innovation by Tonni Jensen (Gubban on BGG). Merely limit teams to jumping two riders each turn. Slows down road clogging, and allows teams to set themselves up for slip streaming, especially in sprint areas.

^{xxviii} Another Daniel Kazaniecki (Garf on BGG) innovation. Breaking away from the peloton requires additional energy.

^{xxix} Although I have read of riders voluntarily being left behind the peloton, I have not seen any explanation of how this might work. This is my suggestion for assisting teammates who have punctured, fallen or got caught in traffic.

^{xxiixxx} It became apparent that it was much too powerful for a team to remain in control of the peloton uncontested. I found this rule in a document labeled "Leader 2 Player Aid Revised 2010", author is unknown

^{xxxi} This rule idea comes from a French version of Leader 2, "Regle LEADER 1: L'enfer du Nordv2." Author is unknown. I am not certain where I found this rule set.

^{xxxii} These weather rules were adapted from Tonni Jensen's (Gubban on BGG) Peloton Expansion. Tonni uses an 8 sided die. I use a 10 sided die. Tonni does not use +/-2 or +1 wind. My experience is that +1 wind gives the break too much strength. A breakaway could win by virtue of a plus one wind. I would suggest only using -1, rainy and sunny weather.

^{xxxiii} Again, many of the time trial rules were adapted from Jensen's (Gubban on BGG) Peloton Expansion. Unfortunately, his rules are not very clear on how to calculate the time differences. I tried three or four different timing rules. The rules included here have been play tested on various terrains and distances. I was pleasantly surprised that these rules reflected time differences close to the actual time difference in several simulated races.

^{xxxiv} The time trialist is a new cyclist category for Leader 1. I have not seen any rules on BGG to reflect this riding ability. In essence, I have separated rouleurs into two categories: Time Trialists and Classics Riders. Initially, I followed Tonni Jensen's recommendation that sprinters received two free movements on flat tiles. Jean Bourg (BGG) in his "Variant with a Neutral Team" also gave sprinters only two movement points in the flats. With two published sets of rules giving sprinters only two movement points in the flats, I did not question it. For a long time, I knew this made sprinters weak extremely weak, but I did not know how to fix it. (All other riders have an aggregate of 10 free movements between the flats, hills, mountains and down hills. Sprinters only had no points of free movements: 2/1/1/4) I compensated with stage design. I created sprint zones that were three tiles long, instead of two tiles long. In a conversation with Christophe de Kezer, he questioned the strength of sprinters at 2/1/1/4. I finally pulled the trigger. I decided to give sprinters three movement points in the flats. I was afraid this would make them too strong, but instead, it has worked perfectly. Now sprint zones only need to be two tiles long.

^{xxxv} For several reasons I have decided to increase the Classic riders flat cobblestone ability back to 4. First, the cobblestone races tend to be longer, making Classic Riders faster helps the race to finish more quickly. More importantly, a speed of 4 on the flat cobblestones truly sets them apart from other riders. I have increased sprinters to "3" on flat cobblestones because often sprinters serve as domestiques for the Classic Riders during the spring classics.

^{xxxvi} Experience has shown that giving sprinters 3 movement points works well on the flats, but is much too strong in the time trials. Sprinter's time trialing abilities have been dialed back.

^{xxxvii} Time Trialist was a bit too powerful if he received 4 free movements every turn. This encourages time trialists to either pull for their teammates, or to breakaway from other riders.

^{xxxviii} Daniel Kazaniecki (Garf on BGG) had a rule similar to this in Leader 2. Christophe de Kezer has taken this idea to a whole new level. He suggested that I add these rules, I refused, until I saw the World Championship TT results. I realized that there was no way to make good Time Trialists stand out. All we could do was to add AR or F. Thinking I had stumbled onto something brilliant, I suggested adding energy bidons to the best Time Trialists. Christophe kindly pointed out that this was solved by using his rule of "Race Favorite's" receiving an extra energy. Then merely say certain time trialists are favorites for all ITT's. Now I realize that this rule works well for all races. Ian Stannard would receive a energy bidon for Omhet Loop, Froome would receive a bidon every stage of the TDF.

^{xxxix} In Tonni Jensen's Peloton Expansion (Gubban on BGG) he had a "Drop Risk" rule. If the peloton was moving quickly on terrain that was unfavorable to your rider, there was a chance your rider might get dropped if he rode at the back of the peloton. My experience with these rules was that it led to lots of die rolls, slowing the game down. Instead, of his rule, I focus on the sprinters and have them lose energy as they traverse the hills. No die rolls, just the longer they are in the hills, the more energy that is zapped from them.

^{xl} The joint team pursuit on the flats is an innovation of Christophe de Kezer. The chart is also his design.