

スケールステップ for the Native American Flute

A step-by-step progression of exercises, activities, and resources to take you beyond the basic scale.

Developed by Clint Goss and Vera Shanov with Japanese-language text by Moto Ozaki

Playing the basic scale on contemporary Native American flutes can produce incredibly beautiful music. However, many players want to expand their toolbox of techniques, find new sounds, or play melodies beyond the six tones of the basic scale. Playing "alternate scales" is an ideal way to develop your playing.

However, venturing into alternate scales can be daunting. The fingerings are unfamiliar, and free improvisation gives way to anxious concentration. It feels like a huge step backwards - almost like you are a beginner - and some players give up entirely and return to the basic scale.

The exercises, activities, and resources in this *Scale Steps* package are designed to take you beyond the basic scale in a smooth progression that leads to a huge array of scale possibilities on the Native American flute. Rather than sheet music and prescribed exercises, we use finger diagrams and improvisation to build experience and skill.

Note that *Scale Steps* is composed of sheets that we hand out at Native American flute schools, workshops, and retreats. Each sheet is provided to participants as *part of a facilitated exercise or activity*. These sheets are also ideal to hand out at lessons and other facilitated settings.

Since many people have requested copies of these sheets, we have put this package together, and added pages that describe how to use each of the sheets. We have also developed a series of FluteCast videos that walk players through how we use these sheets. Visit https://FluteCast.com/ to find the Scale Steps FluteCast videos, scheduled for release in early 2021.

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We hope that this permissive approach to providing resources to the community of Native American flute players benefits everyone.





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Overview

The sheets in this Scale Steps package are organized into six sections:

A. Introduction & Warmup	D. Chord Progressions	G. Favorite Scales
B. Grounded Intervals	E. Sparse Scales	H. Nine Emotions
C. Interval Sequences	F. Scale Sequences	Z. Fingering Diagrams

We generally introduce each of these sections in turn, with plenty of time for participants to get comfortable with the techniques of each section. Each of these sections has an overview of (and rationale for) each section.

Scale Names

Scale names in black, such as **Minor Pentatonic** and **Blues 6-Tone**, are from established sources. Scale names in maroon, such as **Enigma** and **Blues 8-Tone**, were invented by Clint.

All scales (and many more – 2,241 at last count) are available in Flutopedia's *Comprehensive Scale Catalog* available at https://Flutopedia.com/scale_catalog.htm.

Fingerings

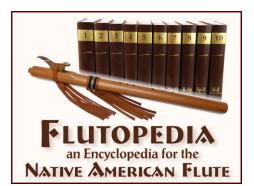
Contemporary Native American flutes have a wide array of possible fingerings. This can be a challenge for flute players at first, but most players learn to accommodate the differences between their flutes.

These Scale Steps sheets address the different fingerings in several ways:

- We have selected the flutes of a few flute makers whose flutes represent a class of common fingerings. The choices of flute makers are not endorsements for those makers they merely represent a class of flute fingerings!
- We have tested those particular classes of flutes and combined that testing with recommended fingerings from that flute maker or recommendations from published sources.
- We have developed a set of **standard fingerings** for those flutes as well as an additional set of possible **alternate fingerings** that might be useful in some situations.

All the sheets beginning with section B are available for each of the different classes of flutes. The sheets in sections B through H use the standard fingerings for that class of flutes, and sheet "Z" shows the standard as well as alternate fingerings.

Choose the class of flutes that most closely matches the flute you are working with. For more information on fingerings, see https://Flutopedia.com/fingerings.htm.



Scale Steps for the Native American Flute

A step-by-step progression of exercises, activities, and resources to take you beyond the basic scale.

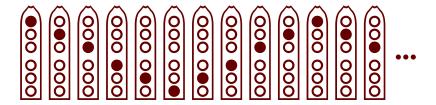
> Developed by Clint Goss and Vera Shanov with Japanese-language text by Moto Ozaki 🤊 🖟 🗓



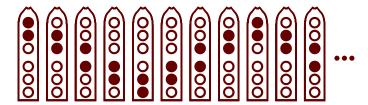
Α

The exercises, activities, and resources in this *Scale Steps* package are designed to take you beyond the basic scale in a smooth progression that leads to a huge array of scale possibilities on the Native American flute. Rather than sheet music and prescribed exercises, we use finger diagrams and improvisation to build experience and skill. sequences are a way to learn a new scale. You can learn the scale so well that you can improvise freely – as freely as the primary scale you first learned on the flute.

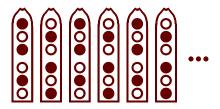
As a warmup, try this sequence (you don't even need to play – just run the fingerings up and down):



... it might be easier if you keep your pinkies on the flute. Next, try these fingerings:



As a final warmup, try repeating these two "piston" fingerings:



And try playing these fingerings. Do they play well on your flute? What is the pitch difference between the two fingerings?

Finally ... try this exercise: Play all Wrong Notes. Use random fingerings. Go Wild! Can you create something that <u>sounds</u> like a song, using all wrong notes?



The best way we have found to introduce players to new fingerings is to begin by playing intervals – pairs of tones. The first two sheets – A1 and A2 – introduce *Grounded Intervals* – a pair of tones where the first tone is always ••••••. Sheets A1 and A2 (typically printed two-sided) have identical intervals – A1 is more basic and A2 has more information about each grounded interval.

We use these grounded intervals for improvisation. This idea of improvisation is central to the whole *Scale Steps* approach:

Improvisation: Every group of tones – from an interval (a pair of tones) up to a full-blown scale – is an opportunity to improvise a melody.

We encourage players to play the tones up and down – evenly at first and then progressing to creating a "Scale Song". Scale Songs are scales played up and down, with the option to stop on any tone and "hang out there" – improvise on that one tone – before moving on *in the same direction*.

To improvise on one tone, you can use dynamics (loud-soft), articulation (the attack at the start of the note), duration (e.g stacatto), rhythm, silence, texture, and vibratro. See the *Scale Songs* FluteCast video at https://youtu.be/Uv9Tw8RwY5Y or the *Scale Song* chapter in the *Native Flute Handbook*, available at https://NativeFluteHandbook.com/.

Scales Songs are a great way for novices to progress beyond playing the basic scale up and down. They offer freedom to improvise in a limited way, within a structure they know well.

Scale Songs are "stepwise" melodies. Progressing further, we can play "leaps" – melodic jumps beyond the neighboring tone (see the *Leaps and Steps* video at https://youtu.be/YeM2-YtFuCE). Leaps are physically more challenging than steps, but really ingrain the finger patterns needed for alternate scales.

We use the same outline of improvisations for every group of tones in all of Scale Steps:

- Play the tones up and down,
- Play a "scale song" over the tones,
- Introduce leaps in you improvisation.

Facilitation

The approach we use for sheet B1 is outlined on the sheet itself. We have to be careful to tell participants that sheet B2 is the same a B1, but with a lot of additional information on each interval. We do not actually use B2 for an activity – it is just for reference.

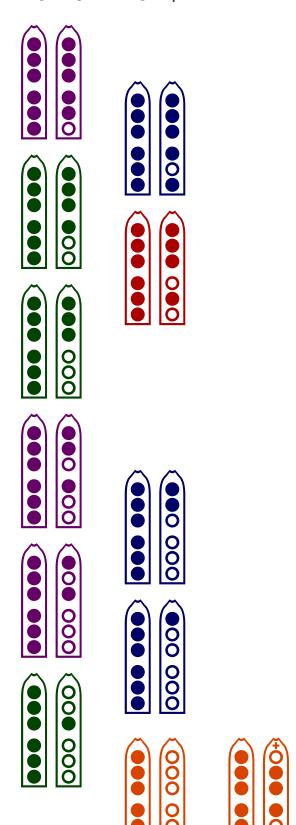


Grounded Intervals on Native American Flutes



Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

Developed by Clint Goss and Moto Ozaki



- 1. Choose one pair of tones (green and purple are the easiest).
- 2. Learn your two tones by playing them back and forth learn the fingerings very well.
- 3. Begin improvising melodies, using just the two tones. Try different techniques such as:
 - dynamics (loud-soft),
 - different attacks at the start of a note,
 - duration (long and short notes),
 - rhythm,
 - silence,
 - vibrato, and
 - texture (try humming into the flute).
- 4. See if you can improvise melodic phrases in the span of one complete breath.
- 5. Progress to playing several one-breath phrases that are linked together.
- 6. Try another pair of tones. Can you improvise with each pair of tones as well as you did with the first pair?
- 7. The next page has exactly the same intervals, but with a lot of additional information on each interval.



底 Soko

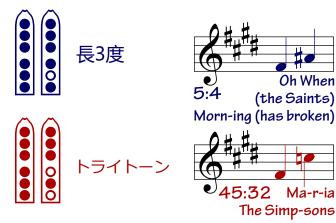
Grounded Intervals — More Information

Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

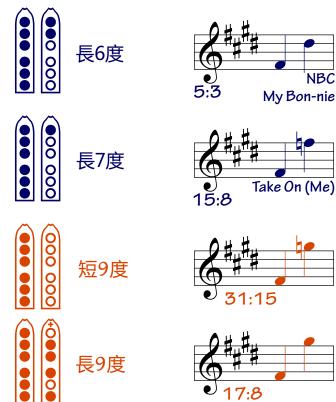
B2

Developed by Clint Goss and Moto Ozaki





このページは、ペンタトニックマイナースケールのネイテ ィブアメリカンフルートにおける基本音(フィンガーホ ールを全て塞いだ音)からの音の跳躍(音程)を、 よく知られる曲の出だしの音を例にとって紹介しています。



Intervals are colored based on their "quality": Minor, Major, Diminished, Perfect, and Extended (beyond an octave).

The ratio shown for each interval is the

nearest five-limit Just Intonation ratio.

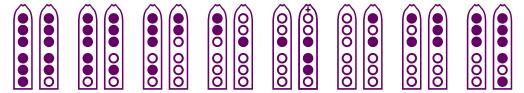
C. Interval Sequences

C

The second set of sheets introduce *Lifted Intervals* – pairs of tones where the first tone is ••••• and above.

Rather than playing each interval just from the fundamental (••••), each line of pairs of tones shows how to play one particular interval – Minor Third, Major Third, Perfect Fourth, etc. – in many different ways.

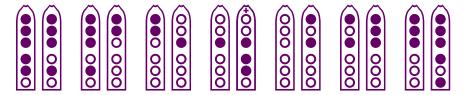
Here is the group of tones for the Minor Third:



The first pair of tones ...



... is the Grounded Interval, and the next seven pairs ...



... are Lifted Intervals.

We like to keep the idea of improvisation by coaching players to ...

Improvise on each pair of tones for as long as you like, then move on to the next pair when you are comfortable. You can begin each new pair slowly, playing them back and forth and then introducing improvisation techniques like we used in the Scale Song.

This idea of improvising on each group of tones before moving on to the next group applies to all the tone sequences in this document. We believe it reduces anxious concentration and keeps players in a creative mind set.

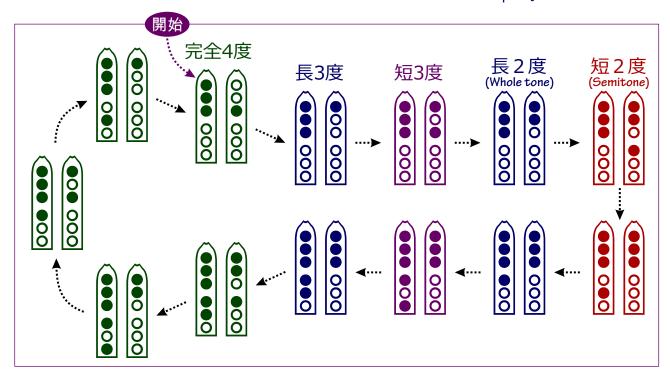


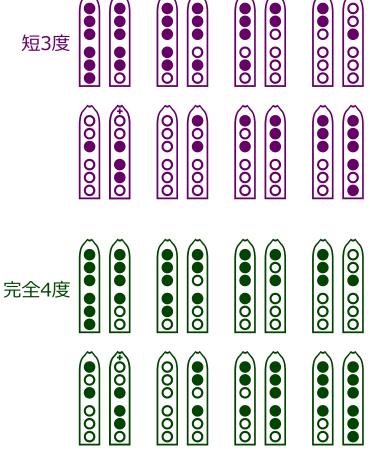
<u>音程シーケンス</u>



Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

Developed by Clint Goss and Moto Ozaki





- 1. Begin at 開始 and follow the arrows around the sequence of intervals.
- 2. Improvise on each pair of tones (each interval) for as long as you like. You can begin each new pair slowly, playing the two tones back and forth. You can then begin improvising using the techniques from the Grounded Intervals sheet (dynamics, attacks, duration, rhythm, silence, vibrato, and texture).
- 3. When you are comfortable, move on to the next pair of tones.
- 4. You can use the same style with each pair of tones, or you can change styles to make it more of a song.
- 5. Can you play all the intervals in a single breath?
- 6. Try the Minor Third and Perfect Fourth sequences of intervals. Can you improvise with these new sequences as well as you did with the first one?

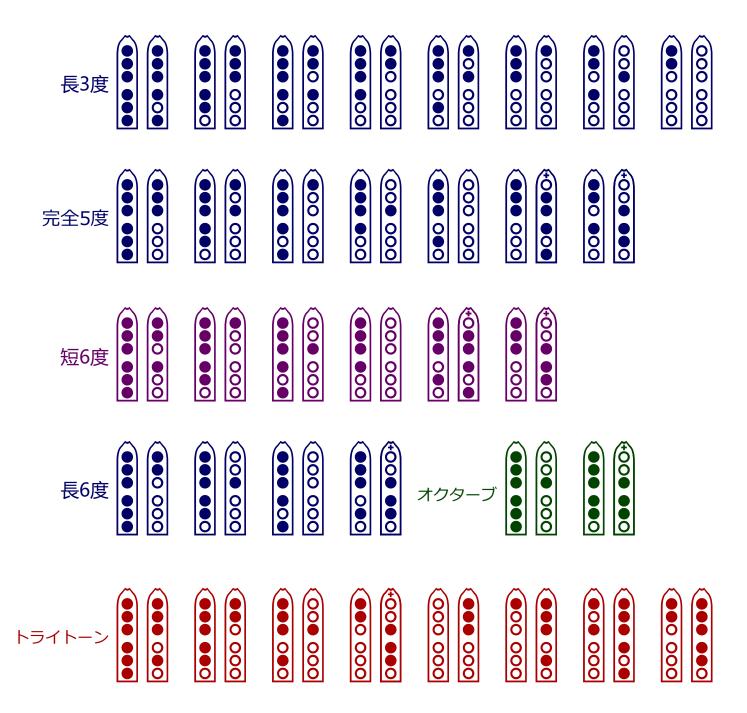


音程シーケンスの続編



Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

Developed by Clint Goss and Moto Ozaki



D. Chord Progressions

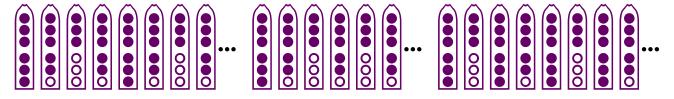
D

The next step involves harmonic motion – moving from one chord to another. We do this with groups of three tones, the most basic unit of a chord.

We still encourage players to improvise on one group (one chord) before moving to the next.

Many players find a style or pattern to play one group, and then use that same style or pattern for all the groups in that sequence. For example, for the three tones shown at the right, here are several patterns that could be used:





If this use of patterns starts to sound like an exercise, that's OK. The key is that it is an exercise created by the player, one that they are comfortable with and can probably apply to other groups of tones. Patterns done in this way can be a valuable exercise to build dexterity and familiarity with chord progressions.

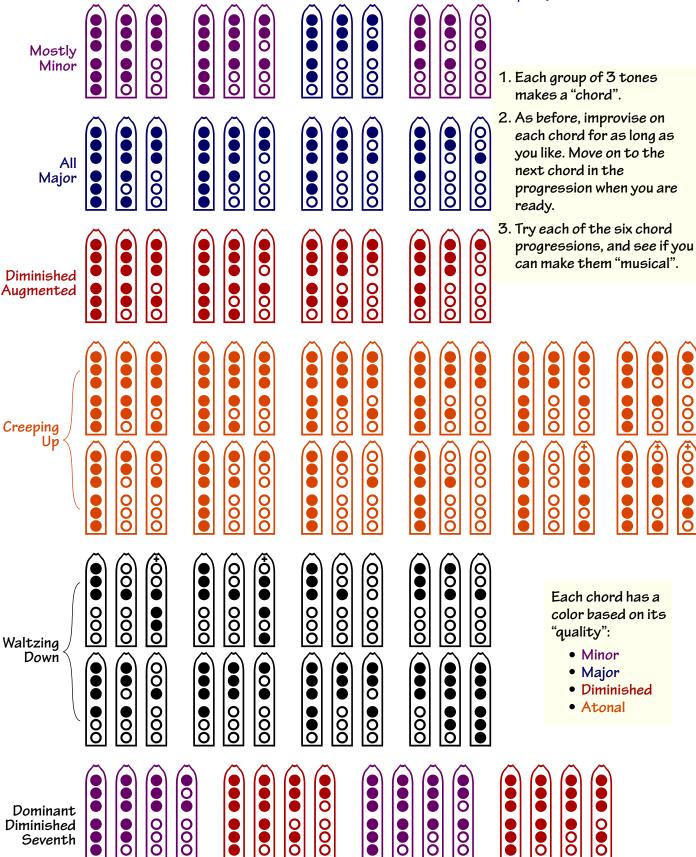


Chord Progressions on Native American Flutes



Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

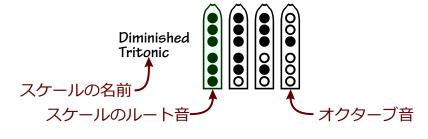
Developed by Clint Goss and Moto Ozaki



We now move on to scales, beginning with "Sparse Scales". I use the term "Sparse Scale" for any scale that has three tones in one octave.

Sparse scales are an excellent next step – they involve creating melodies with four tones, and they open the opportunity to explore consonance and dissonance.

While sparse scales officially have three tones, we show them with four tones, because we include the octave tone as well as the root:



We always show the root tone of a scale with a green background: ••• ••• This is done throughout the rest of these Scale Steps sheets. Note that the root tone is not always the bottom note!

Scale Names

Scale names shown in black, such as **Sarvasri** and **Ongkari**, are from established sources. Scale names in maroon, such as **Sarvasri Augmented** and **Tense Minor 3rd**, were invented by Clint.

Harmonic Categories

We organize the sparse scales into three harmonic categories: **Consonant**, **Dissonant**, and **Tense**. The idea of **Tense** is that they are very dissonant. However, these classifications are my own value-judgements. In a workshop setting, we often ask participants to listen to the solos that are being played and decide for themselves whether they find that scale **Consonant**, **Dissonant**, or **Tense**.

Facilitation

We usually ask participants to pick a scale, learn it well (sometimes in a 5-10 minute break), and then play a one-breath or two-breath solo when they come back from the break.



Sparse Native American Flute Scales Fingerings for High Spirits Mid-Tone A flutes by Odell Borg Developed by Clint Goss



	<u>Consonant</u>	<u>Dissonant</u>	<u>Tense</u>
Vietnamese Tritonic		Diminished Tritonic	Tense Minor 3 rd
Ute Tritonic		Balanced Tritonic	Tense Major 3 rd
Ute Tritonic Augmented		Bilwadala Bilwadala	Tense Fourth
Major Triad		Ongkari	Tense Fifth
Sarvasri		Italian Sixth	Tense Minor 6 th
Sarvasri Augmented		Enigma Three-Tone	Tense Major 6 th
Bugle		Tritone Minor 7th Minor 9th Chord	Tense Seventh

- 1. Select one four-tone "sparse scale" and improvise a melody two to four breaths in that scale. Use all the tools of improvisation that were used on the previous sheets.
- 2. Try other sparse scales. Can you make your improvisations "musical"? Do you prefer Consonant scales, Dissonant scales, or "Tense" (very dissonant) scales?

F. Scale Sequences



Each Scale Sequences sheet in the next section help players learn one particular scale. The "target scale" being learned is at the bottom of each page.

The typical scale sequence starts with a sparse scale and builds by adding one tone at a time until the target scale at the bottom of the page.

Each scale leading to the target scale does have a name, but we label them "A...B...G..." instead. This seems to reduce mental anxiety – rather than worrying about identifying the scales in the progression, we want players to just get comfortable with the fingerings. However, for reference, here are the sequences of scales we use:

Tense Fifth \rightarrow Savasri Add b6 \rightarrow Major Triad Add 4 \rightarrow Major Triad Add 4 b9 \rightarrow Zilaf Add b9 \rightarrow Spanish Gypsy

Ongkari \rightarrow Dream \rightarrow Dream Add b3 \rightarrow Blues 6-Tone \rightarrow Blues 6-Tone \rightarrow Blues 8-Tone

Woven Scales

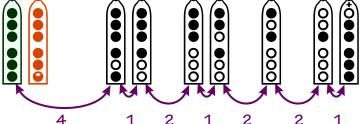
The Woven Scales at the bottom of each sheet provides a great exercise to solidify the fingerings. The tones are meant to be played in order, and the woven scale follows the "two forward, one back" pattern.

See the Woven Scales FluteCast video at https://youtu.be/w9JN0WEM4bo (released March 2019) or the Alternate Scales chapter in the Native Flute Handbook, available at https://NativeFluteHandbook.com/.

Scale Degrees

Beginning with this section, we space out the scales to show the size of the interval between the

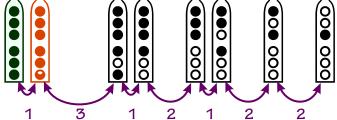
fingerings:



The purple arrows show the number of semitones between each tone. We have skipped the orange fingering, which rarely sounds good. We have also included the final interval above the octave.

If you would like to look up this scale in other resources, these "scale degree" patterns can be helpful. In this case, you would use these degrees - including the orange fingering and without the tones above

the octave:



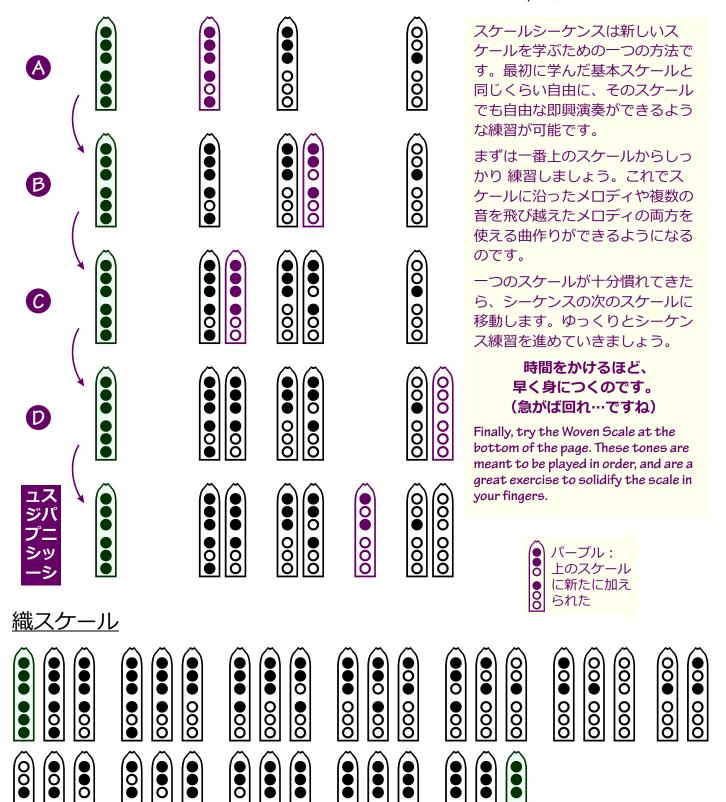


スケールシーケンス練習:スパニッシュジプシー

F1

Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

Developed by Clint Goss and Moto Ozaki



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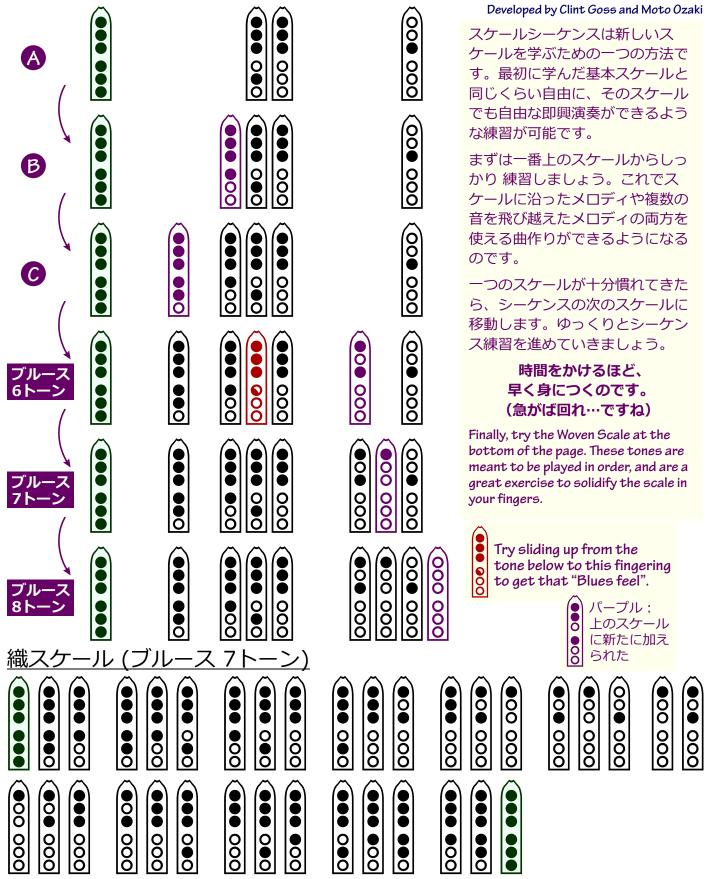
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スケールシーケンス練習:ブルーススケー

F2

Fingerings for High Spirits Mid-Tone A flutes by Odell Borg



G. Favorite Scales



Each of the sheets in the Favorite Scales section shows seven or eight scales.

Unlike the "building block" approach of the scale progressions of the previous section, each scale in this section stands on its own. However, it is still best for participants to learn the scale starting with two or three tones, then adding one tone at a time.



クリントのお気に入りネイティブ アメリカン フルート スケール

G1

Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

Developed by Clint Goss and Moto Ozaki 00 00 OO • ě マイナー ズニ サンライズ Ŏ ペンタト 000 000 000 感情:愛 •00 ニック 000 000 000 • マイナー "モード4" ダイアト サマータイム 000 000 ニック •00 グリーンスリーブス R4 賛美歌と多くの西洋メロディ: † 0 0 000 シェナンドー 00 ••0 ぞうさん メジャー ジョイ トゥ ザ ワールド ダイアト オーバー ザ レインボー ニック 000 000 000 ザ ファースト ノエル カラーズ オブ ザ ウインド R3 00 • ノーザン 多くの伝統的メロディ 000 •00 000 000 -ス 7トーンと8トーンはこれを含めます The Blues Scale 000 000 000 Ŏ **•**000 000 **•**0**•** 000 ブルース 000 8 Ŏ -ブルース 8トーンではこれを含めます 00 000 感情: 悲しみ 都節 000 000 000 000 000 • 00 カイロの街 000 000 000 000 (別名:へび使いの歌)









お気に入りネイティブ アメリカン フルートスケール 続編



Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

Developed by Clint Goss and Moto Ozaki

000 00 000 Ŏ • ミクソリ Ŏ ディアン ハッピーバースデイ 000 000 000 000 •00 R3 000 0 メジャー ••0 000 もみの木 ダイアト アメイジンググレイス(lower) シンプルギフト 000 000 000 00 ニック カヨワチネ(カヨワヒネ) R4 000 00 バヌマン 感情:怒り 000 000 000 ジャリ 0 000 000 000 ハリナタ 0 000 000 000 00 000 ••• •0• 琉球 感情: 平和 000 000 000 000 000 000 000 000 000 •00 The Chromatic Scale 00 000 • 00 000 • クロマテ 全ての音 00 0 000 000 000 000 000 ィック 不協和なメロディー を作成するのに理想的 В С ()=Amネイティブアメリカン フルートの主要な音 栗色: 次のオク -ブの音

H. Scales for Nine Emotions



This section shows the scales we use for the our Playing Nine Emotions session at flute workshops.

See the *Playing Nine Emotions* chapter in the *Native Flute Handbook*, available at https://NativeFluteHandbook.com/.



9つの感情に対するネイティブアメリカンフルートスケール



Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

Developed by Clint Goss and Moto Ozaki 0 00 Ŏ マイナー Ŏ 愛 ペンタト 000 000 000 •00 ニック 100 **⊕**000 00 000 メジャー ダイアト 喜び 000 ••• 000 000 ニック 00 •0 •00 Yorokobi •0 R3 000 000 • • 悲しみ 都節 000 000 000 •00 Kanashimi (ô) 怒り バヌマン •0• 000 000 000 00 ジャリ Ikari 00 000 • • ••• 恐れ エニグマ 000 000 000 •00 •00 000 Osore 000 000 ••• •0• The Mand Scale 勇気 マンド 000 000 000 Yūki 000 嫌悪 000 00 嫌悪 調子外れの音のため 000 0.0 000 の標準外の指使い 不快な倍音を出すための **†**000 ••• •0• **•**00 000 様々な指使いを使います 驚き 驚き Odoroki オクターブでない音 000 • 00 平和 琉球 000 000 000 Heiwa 00

The remaining sheets are for more advanced players. They provide a reference for all the recommended and alternate fingerings for each of the standard pitches.

These charts have a lot of information, and could really confuse players if they are not ready for them. We do provide them in workshops, but we only hand them out at the end of the whole Scale Steps sequence of sessions / activitie, and we say they are "just for reference".

For advanced players, they are useful for:

- Finding the recommended fingerings when moving from one flute to another;
- Finding alternate fingerings that may be useful in a fast passage or run these alternate fingerings might not be tuned as well, but they can be useful if the notes are short.

Color Key



Black for primary fingerings on many of the contemporary Native American flute I play.



Blue for alternate fingerings. The pitch varies slightly, but these fingerings can be convenient for quick passages.



Orange for half-hole fingerings in the lower register. These usually do not resonate well on Native American flutes.

Notes

• the primary scale (minor pentatonic).

The titles above each note (eg. "Minor Third") show the interval from the Root note.

The green symbols (eg. 6^{\sharp}) are Number Tab notation.

The purple syllables (eg. "La") are the Solfège names.

Fingerings for notes in Red above the Octave are in the second register of the flute. These notes resonate differently from notes in the first register. Bright Red fingerings resonate only on "extended range" flutes.



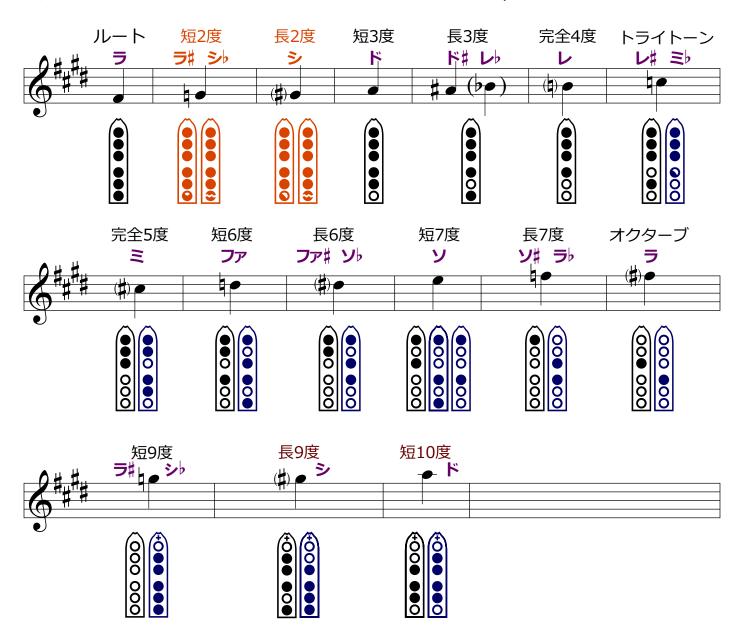
High Spirits Flutes Fingering Chart



Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

F¼mクロマティックスケール

Developed by Clint Goss and Moto Ozaki



運指の色について

黒:基本運指(ウッドサウンズフルート 000 −ムページ参照) HighSpirits.com

- : 代替の運指 - 正確な音程 よりも速い指遣いの際に有効

> オレンジ:穴を半分開く、 または低音域でのトリル

注釈

音符上のそれぞれの名前は、ルート音からの音程。 紫の文字は階名。

赤で示された短9度よりも高い音の運指は、 フルートによって異なるため、 ピッチも多少変わる場もあります。 それらの音は、ウッドサウンズフルートからは 「ギフトノート」とリストアップされています。



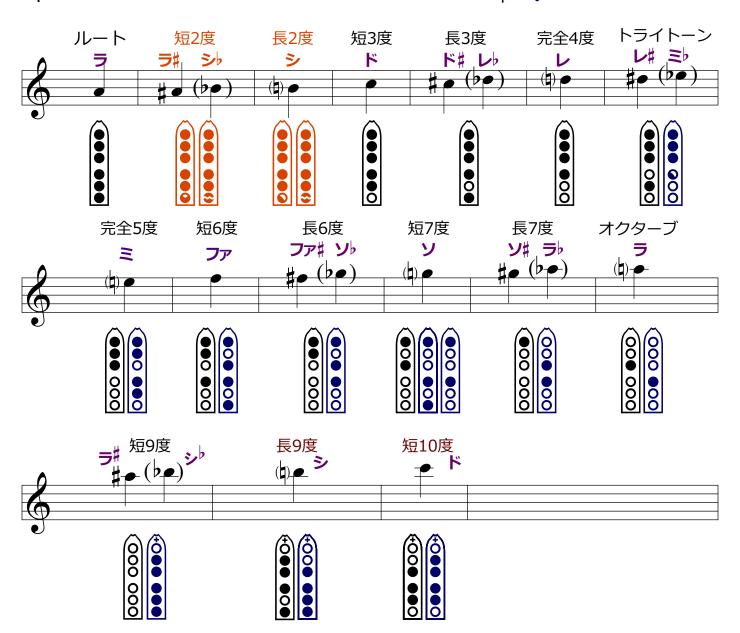
High Spirits Flutes Fingering Chart



Fingerings for High Spirits Mid-Tone A flutes by Odell Borg

 A_4 mクロマティックスケール

Developed by Clint Goss and Moto Ozaki



運指の色について

黒:基本運指(ウッドサウンズフルート 000 −ムページ参照) HighSpirits.com

- : 代替の運指 - 正確な音程 よりも速い指遣いの際に有効

> オレンジ:穴を半分開く、 または低音域でのトリル

注釈

音符上のそれぞれの名前は、ルート音からの音程。 紫の文字は階名。

赤で示された短9度よりも高い音の運指は、 フルートによって異なるため、 ピッチも多少変わる場もあります。 それらの音は、ウッドサウンズフルートからは 「ギフトノート」とリストアップされています。